

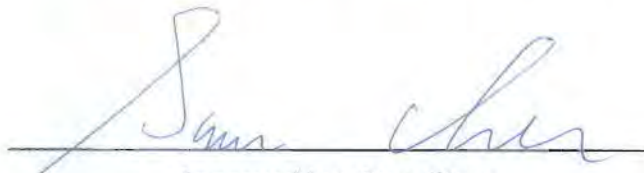


FCC RADIO TEST REPORT

FCC ID : Z3WAIR4971
Equipment : Tri-Band 11ax Smart Wi-Fi Extender, AT&T Smart Wi-Fi Extender
Brand Name : AirTies
Model Name : WFEXT4971-41
Applicant : AirTies Wireless Networks
Mithat Uluunlu Sokak No. 23 Esentepe, Sisli
Istanbul, 34394 Turkey
Manufacturer : AirTies Wireless Networks
Mithat Uluunlu Sokak No. 23 Esentepe, Sisli
Istanbul, 34394 Turkey
Standard : 47 CFR FCC Part 15.407

The product was received on Sep. 25, 2020, and testing was started from Oct. 05, 2020 and completed on Nov. 06, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....3

Summary of Test Result.....4

1 General Description5

1.1 Information.....5

1.2 Applicable Standards10

1.3 Testing Location Information10

1.4 Measurement Uncertainty11

2 Test Configuration of EUT12

2.1 Test Channel Mode12

2.2 The Worst Case Measurement Configuration16

2.3 EUT Operation during Test17

2.4 Accessories17

2.5 Support Equipment.....18

2.6 Test Setup Diagram19

3 Transmitter Test Result23

3.1 AC Power-line Conducted Emissions23

3.2 Emission Bandwidth25

3.3 Maximum Conducted Output Power26

3.4 Peak Power Spectral Density.....28

3.5 Unwanted Emissions.....31

4 Test Equipment and Calibration Data36

Appendix A. Test Results of AC Power-line Conducted Emissions

Appendix B. Test Results of Emission Bandwidth

Appendix C. Test Results of Maximum Conducted Output Power

Appendix D. Test Results of Peak Power Spectral Density

Appendix E. Test Results of Unwanted Emissions

Appendix F. Test Results of Radiated Emission Co-location

Appendix G. Test Photos

Photographs of EUT v01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Conducted Output Power	PASS	-
3.4	15.407(a)	Peak Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Wendy Pan



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11a	20	3TX
5.725-5.85GHz	802.11n HT20	20	3TX
5.725-5.85GHz	802.11ac VHT20	20	3TX
5.725-5.85GHz	802.11ac VHT20-BF	20	3TX
5.725-5.85GHz	802.11ax HEW20	20	3TX
5.725-5.85GHz	802.11ax HEW20-BF	20	3TX
5.725-5.85GHz	802.11n HT40	40	3TX
5.725-5.85GHz	802.11ac VHT40	40	3TX
5.725-5.85GHz	802.11ac VHT40-BF	40	3TX



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11ax HEW40	40	3TX
5.725-5.85GHz	802.11ax HEW40-BF	40	3TX
5.725-5.85GHz	802.11ac VHT80	80	3TX
5.725-5.85GHz	802.11ac VHT80-BF	80	3TX
5.725-5.85GHz	802.11ax HEW80	80	3TX
5.725-5.85GHz	802.11ax HEW80-BF	80	3TX

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ HEW20, HEW40, HEW80 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Composite Peak Realized Gain (dBi)		
						WLAN 2.4GHz	WLAN 5GHz Band 1	WLAN 5GHz Band 4
1	1	AirTies	DB-1	Off-Board Internal Dipole-Like Dual-Band	I-PEX	2.38	2.57	-
2	2	AirTies	DB-2	Off-Board Internal Dipole-Like Dual-Band	I-PEX			-
3	1	AirTies	5G-1	Off-Board Internal Dipole-Like Single-Band	I-PEX	-	-	0.99
4	2	AirTies	5G-2	Off-Board Internal Dipole-Like Single-Band	I-PEX	-	-	
5	3	AirTies	5G-3	Off-Board Internal Dipole-Like Single-Band	I-PEX	-	-	

Note: The above information was declared by manufacturer.

For WLAN 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

For WLAN 5GHz Band 1 function:

For IEEE 802.11a/n/ac/ax mode (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

For WLAN 5GHz Band 4 function:

For IEEE 802.11a/n/ac/ax mode (3TX/3RX):

Port 1, Port 2 and Port 3 can be used as transmitting/receiving antenna.
Port 1, Port 2 and Port 3 could transmit/receive simultaneously.



1.1.3 Mode Test Duty Cycle

For WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S / CDD and Beamforming Mode:

Table with 5 columns: Mode, DC, DCF(dB), T(s), VBW(Hz) ≥ 1/T. Rows include modes like 802.11a, 802.11ac VHT20, 802.11ac VHT20-BF, etc.

For WLAN 5GHz Low Band 2T2S SDM Mode:

Table with 5 columns: Mode, DC, DCF(dB), T(s), VBW(Hz) ≥ 1/T. Rows include modes like 802.11ac VHT20, 802.11ac VHT40, 802.11ac VHT80, etc.

For WLAN 5GHz High Band 3T2S / CDD and Beamforming Mode:

Table with 5 columns: Mode, DC, DCF(dB), T(s), VBW(Hz) ≥ 1/T. Rows include modes like 802.11ac VHT80, 802.11ax HEW80.

For WLAN 5GHz High Band 3T3S SDM Mode:

Table with 5 columns: Mode, DC, DCF(dB), T(s), VBW(Hz) ≥ 1/T. Rows include modes like 802.11ac VHT80, 802.11ac VHT80-BF, 802.11ax HEW80, 802.11ax HEW80-BF.

Note:
• DC is Duty Cycle.
• DCF is Duty Cycle Factor.



1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	For IEEE 802.11ax/VHT in 2.4GHz and IEEE 802.11ac/ax in 5GHz.			
Function	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
Test Software Version	For non-beamforming mode: Access Manual Tool 3.2.1.0 For beamforming mode: Telnet			

Note: The above information was declared by manufacturer.

1.1.5 EUT Support Function

The EUT supports AP mode and mesh mode. Only the AP mode was tested and recorded in this test report.

1.1.6 Table for Multiple Listing

The EUT has two equipment names which are identical to each other in all aspects except for the following table:

Brand Name	Model Name	Equipment Name	Description
AirTies	WFEXT4971-41	Tri-Band 11ax Smart Wi-Fi Extender	All the equipment names are identical, the difference equipment names for difference served as marketing strategy.
		AT&T Smart Wi-Fi Extender	

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ FCC KDB 789033 D02 v02r01

The following reference test guidance is not within the scope of accreditation of TAF.

- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01
- ◆ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location		
<input type="checkbox"/>	HWAYA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C. TEL : 886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH02-CB	Caster Chang	22.7-23.5°C / 58-61%	Nov. 06, 2020
Radiated<1GHz and Radiated co-location	03CH06-CB	Stim Sung	23.2-23.7°C / 53-57%	Oct. 05, 2020
Radiated>1GHz	03CH01-CB	Gino Huang	24.5-25.9°C / 53-55%	Oct. 09, 2020 ~ Nov. 05, 2020
AC Conduction	CO02-CB	Wei Li	22~23°C / 59~62%	Oct. 07, 2020

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.



1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.39%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S / CDD and Beamforming Mode:

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	85
5200MHz	99
5240MHz	94
802.11a_Nss1,(6Mbps)_3TX	-
5745MHz	96
5785MHz	100
5825MHz	101
802.11ac VHT20_Nss1,(MCS0)_2TX	-
5180MHz	84
5200MHz	98
5240MHz	94
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-
5180MHz	88
5200MHz	100
5240MHz	94
802.11ac VHT20_Nss1,(MCS0)_3TX	-
5745MHz	96
5785MHz	99
5825MHz	99
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
5745MHz	96
5785MHz	99
5825MHz	97
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	82
5200MHz	97
5240MHz	94
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	82
5200MHz	98
5240MHz	94
802.11ax HEW20_Nss1,(MCS0)_3TX	-
5745MHz	96
5785MHz	102



Mode	Power Setting
5825MHz	99
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-
5745MHz	103
5785MHz	105
5825MHz	105
802.11ac VHT40_Nss1,(MCS0)_2TX	-
5190MHz	72
5230MHz	95
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-
5190MHz	73
5230MHz	96
802.11ac VHT40_Nss1,(MCS0)_3TX	-
5755MHz	102
5795MHz	104
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
5755MHz	102
5795MHz	105
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	72
5230MHz	96
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	72
5230MHz	96
802.11ax HEW40_Nss1,(MCS0)_3TX	-
5755MHz	99
5795MHz	103
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-
5755MHz	100
5795MHz	104
802.11ac VHT80_Nss1,(MCS0)_2TX	-
5210MHz	72
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-
5210MHz	73
802.11ac VHT80_Nss1,(MCS0)_3TX	-
5775MHz	91
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-
5775MHz	92
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	72
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-



Mode	Power Setting
5210MHz	71
802.11ax HEW80_Nss1,(MCS0)_3TX	-
5775MHz	91
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	-
5775MHz	92



For WLAN 5GHz Low Band 2T2S SDM Mode:

Mode	Power Setting
802.11ac VHT20_Nss2,(MCS0)_2TX 5180MHz	- 84
802.11ac VHT40_Nss2,(MCS0)_2TX 5190MHz	- 76
802.11ac VHT80_Nss2,(MCS0)_2TX 5210MHz	- 74
802.11ax HEW20_Nss2,(MCS0)_2TX 5180MHz	- 77
802.11ax HEW40_Nss2,(MCS0)_2TX 5190MHz	- 72
802.11ax HEW80_Nss2,(MCS0)_2TX 5210MHz	- 70

For WLAN 5GHz High Band 3T2S / CDD and Beamforming Mode:

Mode	Power Setting
802.11ac VHT80_Nss2,(MCS0)_3TX 5775MHz	- 92
802.11ac VHT80-BF_Nss2,(MCS0)_3TX 5775MHz	- 94
802.11ax HEW80_Nss2,(MCS0)_3TX 5775MHz	- 93
802.11ax HEW80-BF_Nss2,(MCS0)_3TX 5775MHz	- 93

For WLAN 5GHz High Band 3T3S SDM Mode:

Mode	Power Setting
802.11ac VHT80_Nss3,(MCS0)_3TX 5775MHz	- 92
802.11ax HEW80_Nss3,(MCS0)_3TX 5775MHz	- 92



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Normal Lin-EUT (AP Mode) + Adapter

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density
Test Condition	Conducted measurement at transmit chains
Test Mode	1 EUT - WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S, CDD non beamforming mode
	2 EUT - WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S, CDD beamforming mode
	3 EUT - WLAN 5GHz Low Band, 2T2S ,SDM mode
	4 EUT - WLAN 5GHz High Band 3T2S, CDD non beamforming mode
	5 EUT - WLAN 5GHz High Band 3T2S, CDD beamforming mode
	6 EUT - WLAN 5GHz High Band, 3T3S, SDM mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Normal Lin-EUT (AP Mode) + Adapter
Operating Mode > 1GHz	CTX
Test Mode	1 EUT - WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S, CDD non beamforming mode
	2 EUT - WLAN 5GHz Low Band 2T1S and WLAN 5GHz High Band 3T1S, CDD beamforming mode
	3 EUT - WLAN 5GHz Low Band, 2T2S ,SDM mode
	4 EUT - WLAN 5GHz High Band 3T2S, CDD non beamforming mode
	5 EUT - WLAN 5GHz High Band 3T2S, CDD beamforming mode
	6 EUT - WLAN 5GHz High Band, 3T3S, SDM mode



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz + WLAN 5GHz (Band 1)
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz (Band 1) + WLAN 5GHz (Band 4)
Refer to Sporton Test Report No.: FA092402 for Co-location RF Exposure Evaluation.	

Note: The EUT can only be used in Y axis position.

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	AT&T (mfg. by DELTA)	EPS18R0-16	INPUT: 120V~0.5A Max 60Hz OUTPUT: 12V, 1.5A 18W



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Ethernet NB	DELL	E6430	N/A
B	5GHz High Band NB	DELL	E6430	N/A
C	2.4GHz NB	DELL	E6430	N/A
D	5GHz Low Band NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Ethernet NB	DELL	E4300	N/A
B	2.4GHz NB	DELL	E4300	N/A
C	5GHz Low Band NB	DELL	E4300	N/A
D	5GHz High Band NB	DELL	E4300	N/A

For Radiated (above 1GHz):
Non-beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

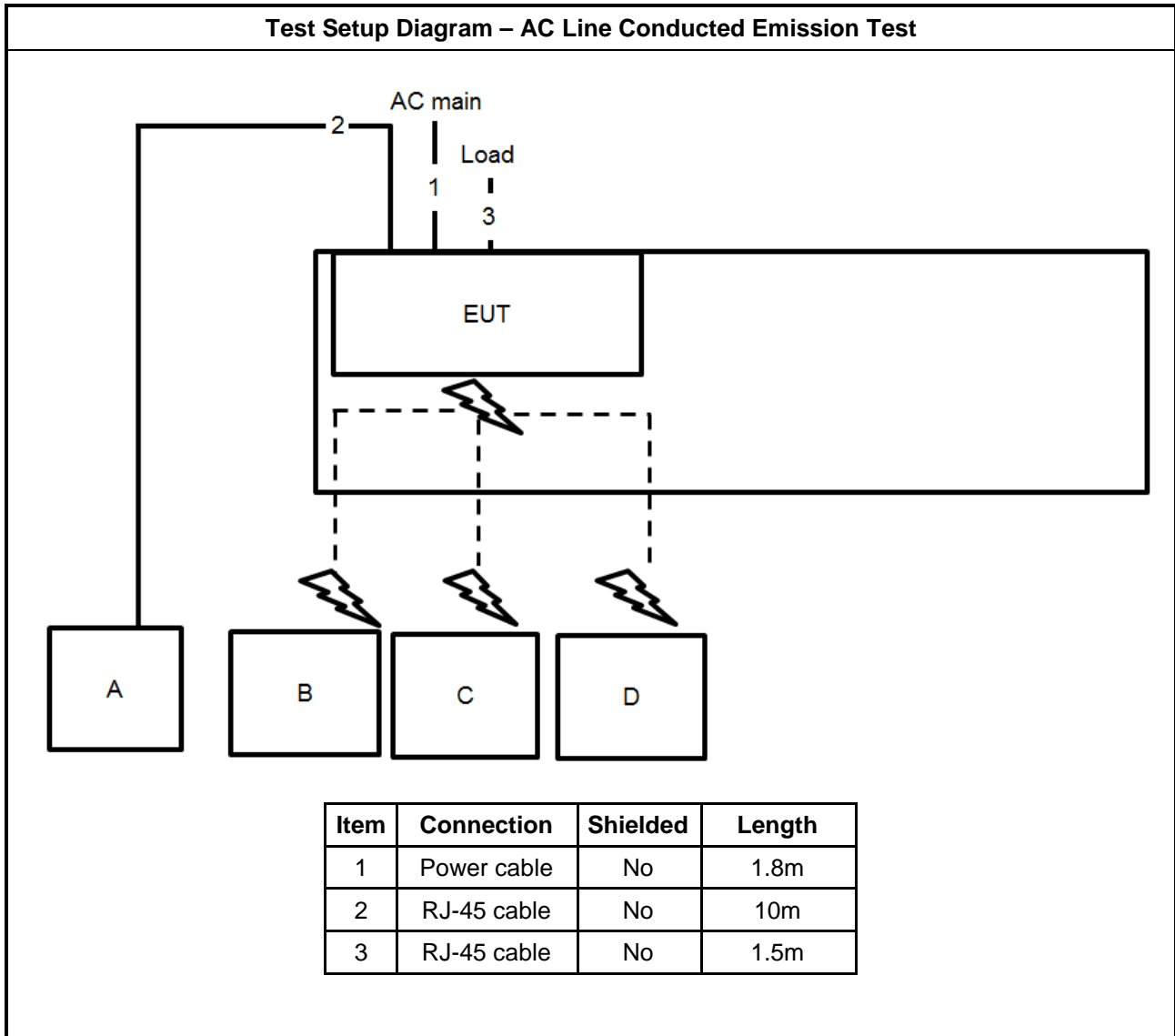
Beamforming mode:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	RX Device	ASUS	RT-AX88U	MSQ-RTAXHP00

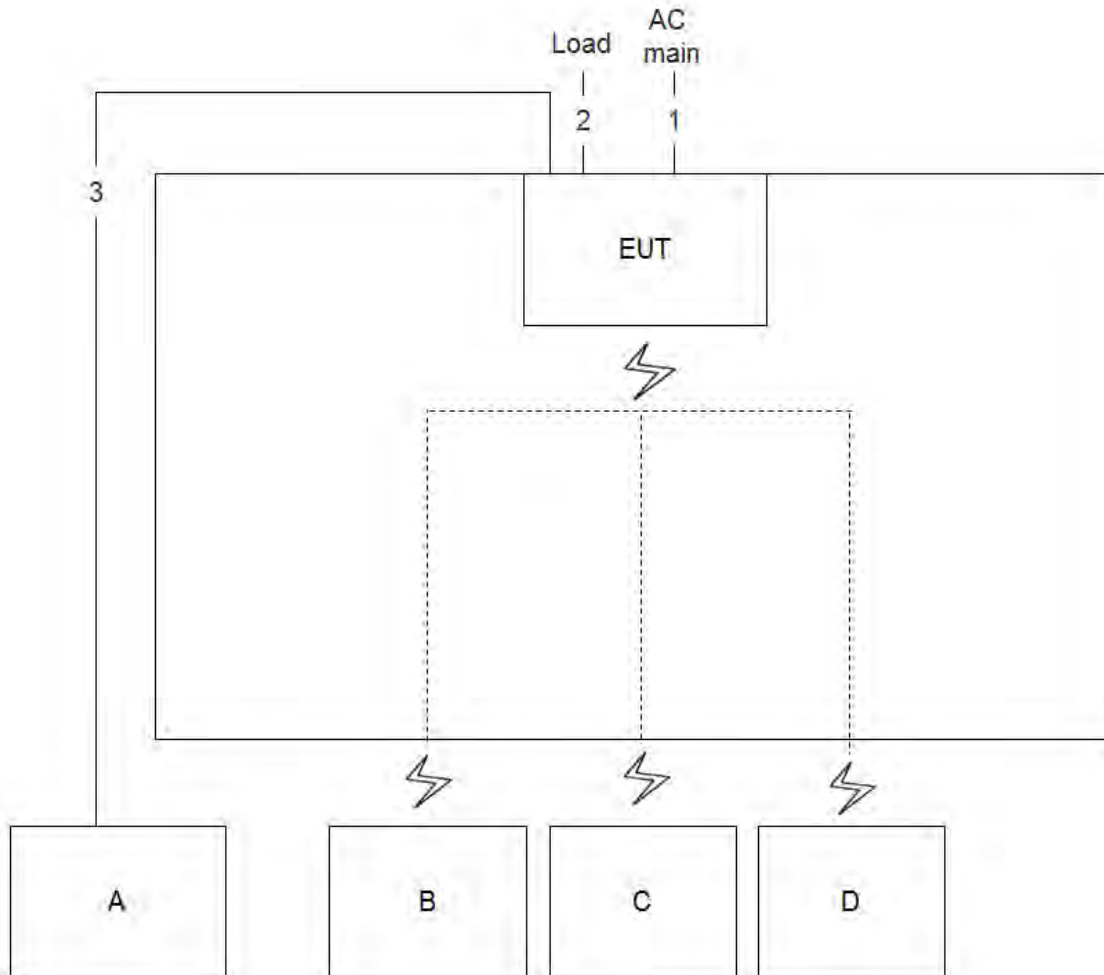
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



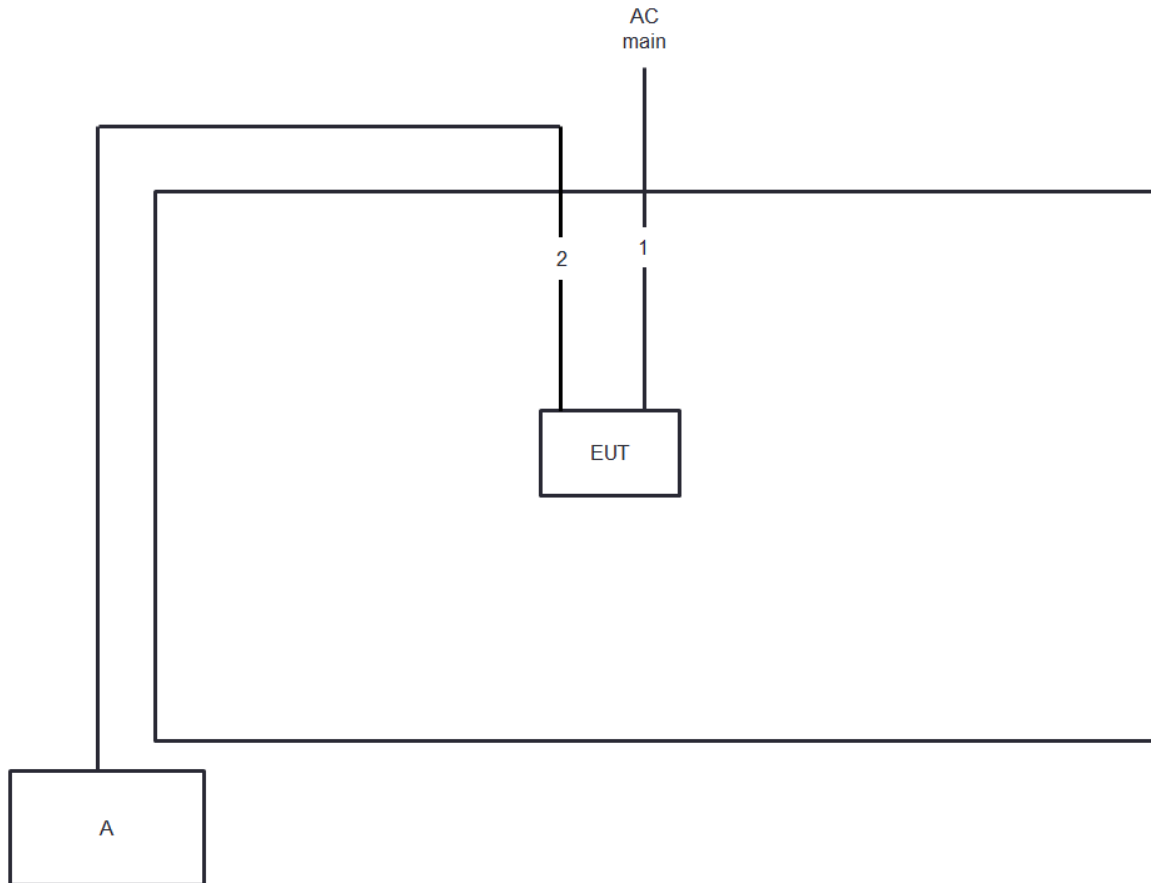
Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

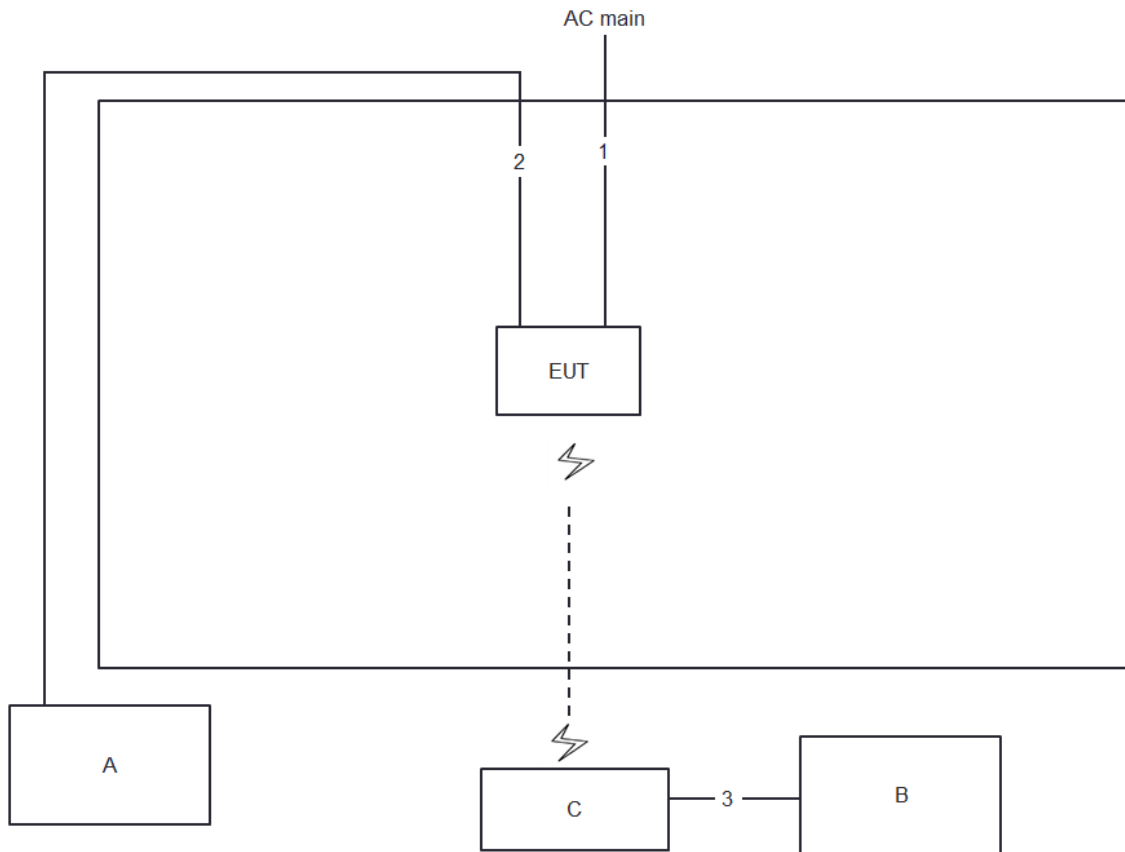


Test Setup Diagram - Radiated Test > 1GHz / Non-beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz / Beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

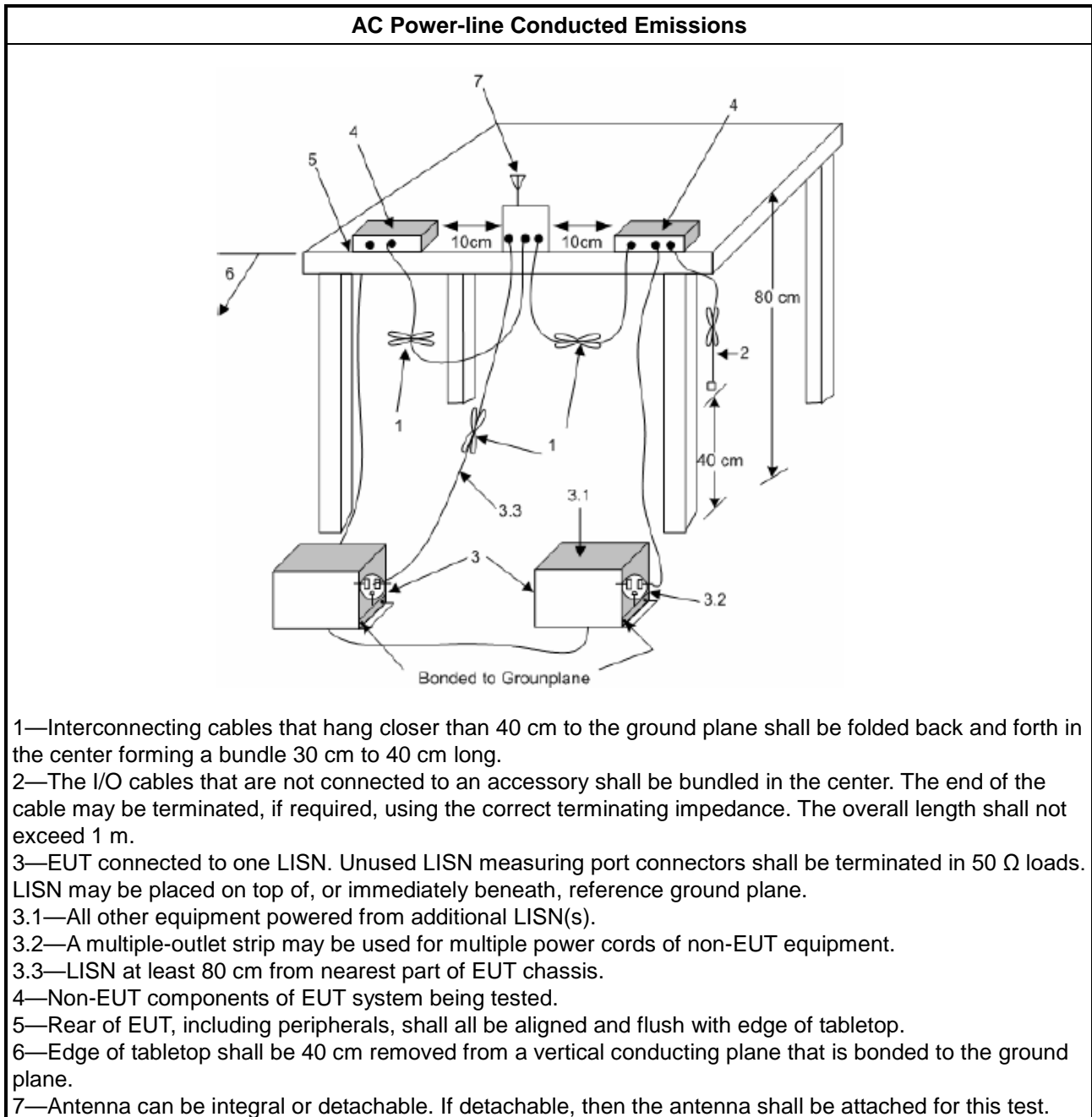
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.
LE-LAN Devices	
<input type="checkbox"/>	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

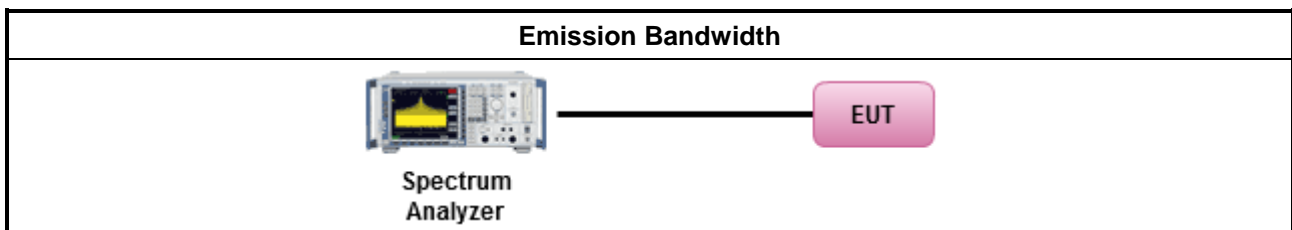
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method							
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30px;"><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.</td> </tr> </table> 		<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.	<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.						
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.						
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.						

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

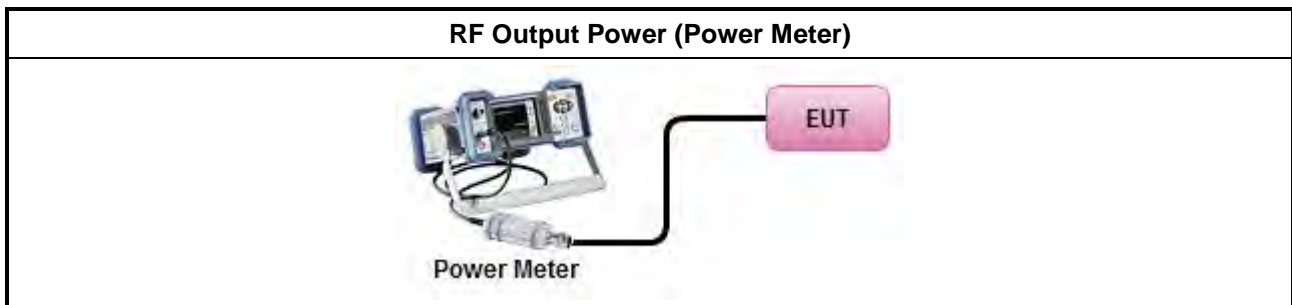
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
Average over on/off periods with duty factor	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).	
<input type="checkbox"/> Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)	
Wideband RF power meter and average over on/off periods with duty factor	
<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).	
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. ▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 17 - (G_{TX} - 6)$. ▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 17 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 ($\theta-8$) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 ($\theta-40$) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If $G_{TX} > 6$ dBi, then $PPSD = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
<p>PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

3.4.2 Measuring Instruments

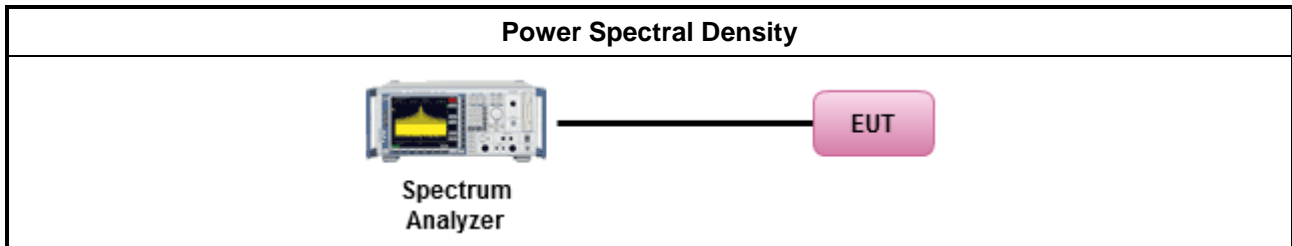
Refer a test equipment and calibration data table in this test report.



3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options: 	
<input type="checkbox"/>	Refer as FCC KDB 789033, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ 	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.



Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Measuring Instruments

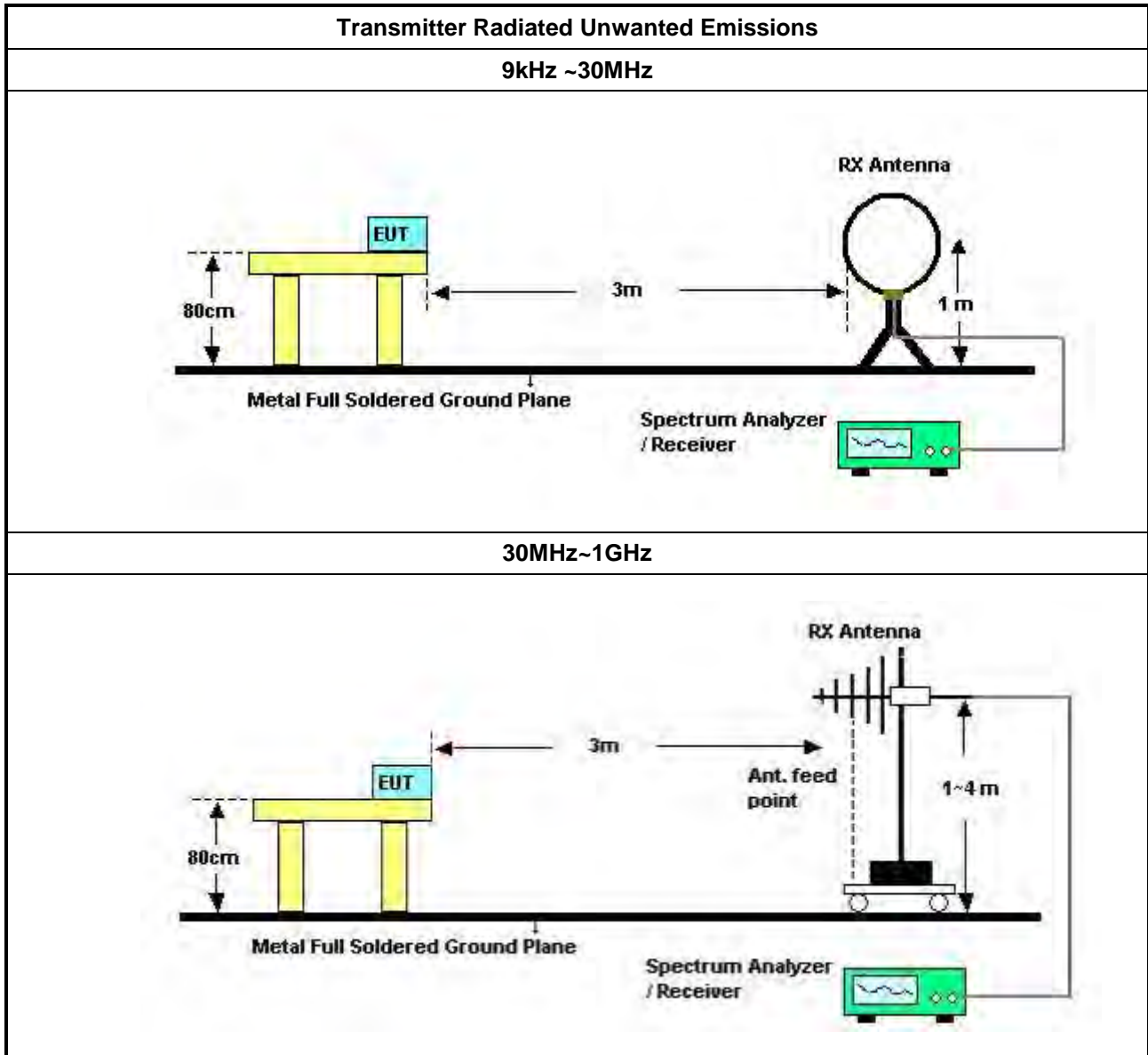
Refer a test equipment and calibration data table in this test report.

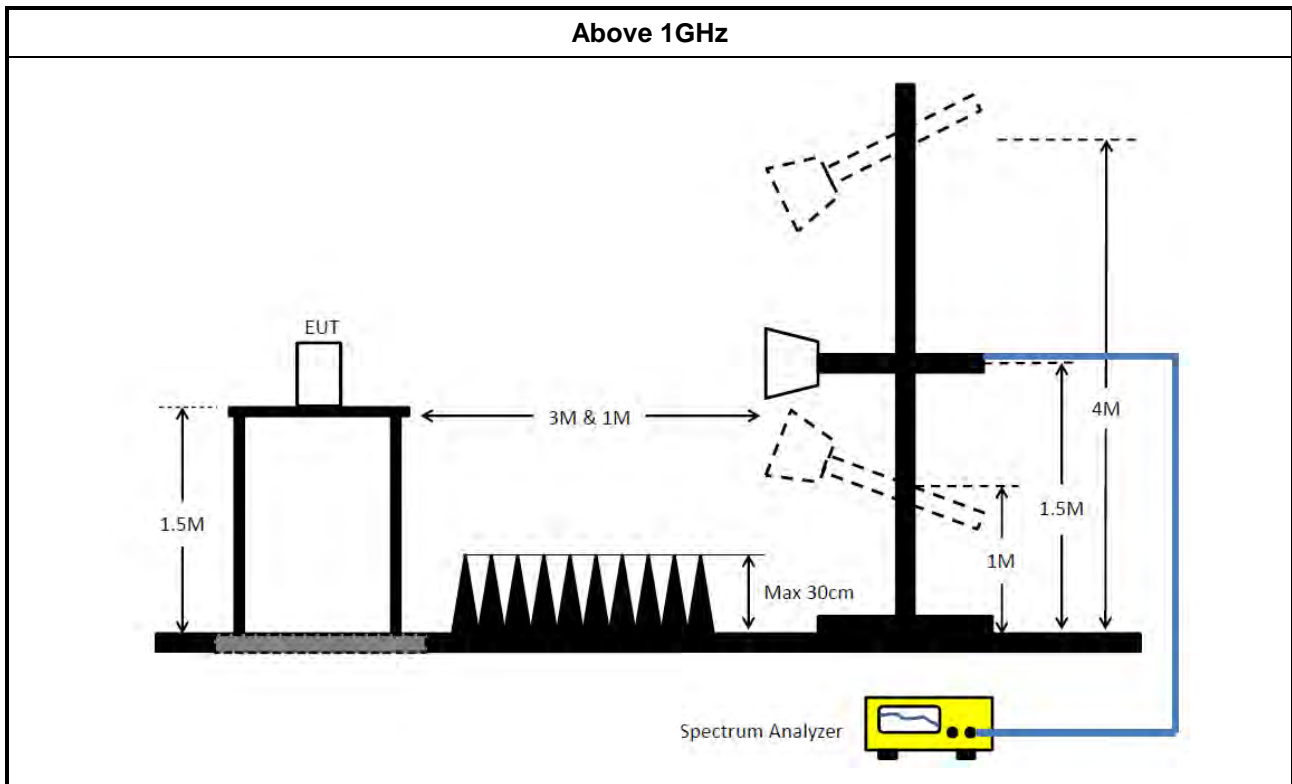


3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements). 	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor]. 	
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For radiated measurement. 	
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level. 	
<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported. 	

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: $Antenna\ factor\ (AF) + Cable\ loss\ (CL) + Read\ level\ (Raw) - Preamp\ factor\ (PA)(if\ applicable) = Level.$

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 21, 2019	Nov. 20, 2020	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Oct. 30, 2019	Oct. 29, 2020	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Mar. 10, 2020	Mar. 09, 2021	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 21, 2019	Oct. 20, 2020	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 19, 2020	Mar. 18, 2021	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH06-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH06-CB	30 MHz ~ 1 GHz	Aug. 10, 2020	Aug. 9, 2021	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 02, 2020	Oct. 01, 2021	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 02, 2020	Aug. 01, 2021	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Jul. 22, 2020	Jul. 21, 2021	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH06-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 21, 2020	May 20, 2021	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHNER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 29, 2020	May 28, 2021	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2019	Nov. 03, 2020	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Sep. 21, 2020	Sep. 20, 2021	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 08, 2020	Jan. 07, 2021	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Apr. 16, 2020	Apr. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Jul. 27, 2020	Jul. 26, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz ~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz ~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz ~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz ~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz ~ 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

Note: Calibration Interval of instruments listed above is one year.
N.C.R. means Non-Calibration required.

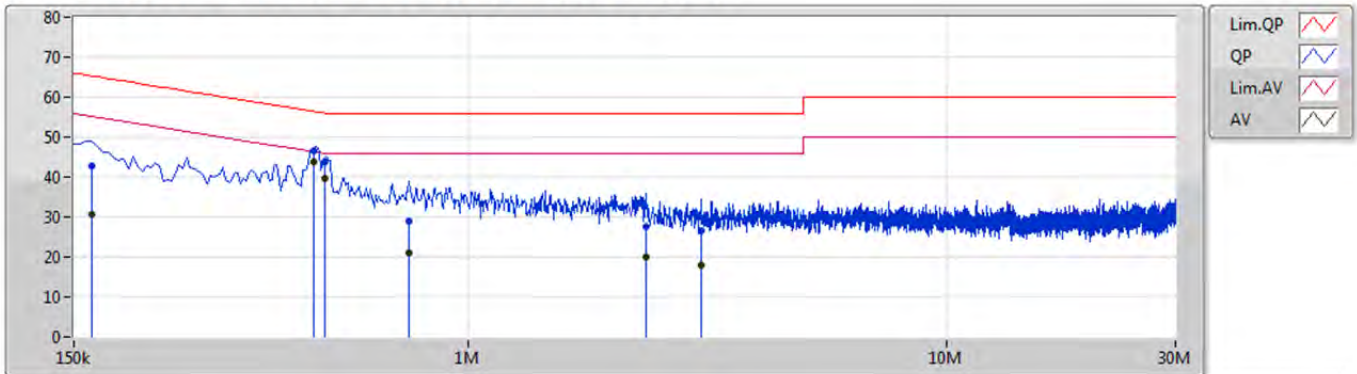


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	475.393k	43.67	46.42	-2.75	Line

Conducted Emissions at Powerline_Mode 1

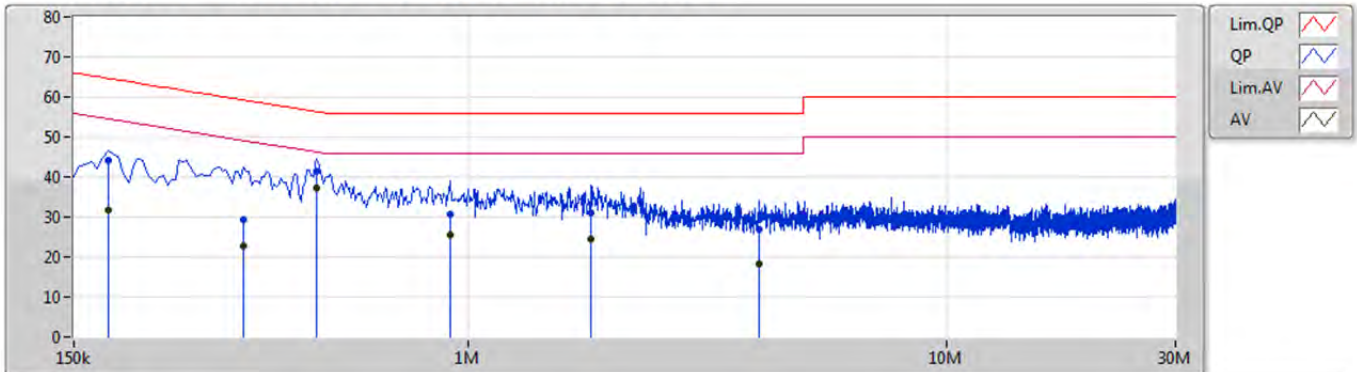
07/10/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	163.5k	42.89	65.27	-22.38	10.27	Line	-	32.62	0.05	0.06	10.16
AV	163.5k	30.84	55.27	-24.43	10.27	Line	-	20.57	0.05	0.06	10.16
QP	475.393k	46.46	56.42	-9.96	10.24	Line	-	36.22	0.05	0.09	10.10
AV	475.393k	43.67	46.42	-2.75	10.24	Line	"Worst"	33.43	0.05	0.09	10.10
QP	501.317k	43.81	56.00	-12.19	10.24	Line	-	33.57	0.05	0.09	10.10
AV	501.317k	39.62	46.00	-6.38	10.24	Line	-	29.38	0.05	0.09	10.10
QP	753k	29.08	56.00	-26.92	10.28	Line	-	18.80	0.06	0.11	10.11
AV	753k	21.15	46.00	-24.85	10.28	Line	-	10.87	0.06	0.11	10.11
QP	2.346M	27.71	56.00	-28.29	10.39	Line	-	17.32	0.10	0.16	10.13
AV	2.346M	19.84	46.00	-26.16	10.39	Line	-	9.45	0.10	0.16	10.13
QP	3.071M	26.59	56.00	-29.41	10.40	Line	-	16.19	0.11	0.15	10.14
AV	3.071M	17.93	46.00	-28.07	10.40	Line	-	7.53	0.11	0.15	10.14

Conducted Emissions at Powerline_Mode 1

07/10/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	177k	44.10	64.62	-20.52	10.27	Neutral	-	33.83	0.05	0.06	10.16
AV	177k	31.56	54.62	-23.06	10.27	Neutral	-	21.29	0.05	0.06	10.16
QP	339k	29.47	59.23	-29.76	10.25	Neutral	-	19.22	0.05	0.08	10.12
AV	339k	22.59	49.23	-26.64	10.25	Neutral	-	12.34	0.05	0.08	10.12
QP	483k	41.47	56.29	-14.82	10.24	Neutral	-	31.23	0.05	0.09	10.10
AV	483k	37.33	46.29	-8.96	10.24	Neutral	"Worst"	27.09	0.05	0.09	10.10
QP	919.5k	30.66	56.00	-25.34	10.29	Neutral	-	20.37	0.06	0.12	10.11
AV	919.5k	25.56	46.00	-20.44	10.29	Neutral	-	15.27	0.06	0.12	10.11
QP	1.806M	30.97	56.00	-25.03	10.36	Neutral	-	20.61	0.08	0.15	10.13
AV	1.806M	24.34	46.00	-21.66	10.36	Neutral	-	13.98	0.08	0.15	10.13
QP	4.038M	26.93	56.00	-29.07	10.41	Neutral	-	16.52	0.11	0.15	10.15
AV	4.038M	18.35	46.00	-27.65	10.41	Neutral	-	7.94	0.11	0.15	10.15

**Test Mode: Mode 1
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	40.98M	25.127M	25M1D1D	24.42M	16.852M
802.11ac VHT20_Nss1,(MCS0)_2TX	43.02M	24.948M	24M9D1D	22.17M	17.901M
802.11ac VHT40_Nss1,(MCS0)_2TX	76.32M	37.961M	38M0D1D	39.9M	36.342M
802.11ac VHT80_Nss1,(MCS0)_2TX	81.96M	75.802M	75M8D1D	81.36M	75.682M
802.11ax HEW20_Nss1,(MCS0)_2TX	42.09M	23.838M	23M8D1D	22.77M	19.1M
802.11ax HEW40_Nss1,(MCS0)_2TX	81.6M	42.099M	42M1D1D	39.84M	37.481M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.48M	76.882M	76M9D1D	81.12M	76.762M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_3TX	16.47M	22.999M	23M0D1D	16.26M	17.631M
802.11ac VHT20_Nss1,(MCS0)_3TX	17.58M	21.889M	21M9D1D	17.49M	18.321M
802.11ac VHT40_Nss1,(MCS0)_3TX	36.36M	63.268M	63M3D1D	36M	42.279M
802.11ac VHT80_Nss1,(MCS0)_3TX	75.96M	76.522M	76M5D1D	75.72M	76.042M
802.11ax HEW20_Nss1,(MCS0)_3TX	18.96M	27.886M	27M9D1D	18.51M	19.37M
802.11ax HEW40_Nss1,(MCS0)_3TX	37.62M	57.991M	58M0D1D	36.36M	38.501M
802.11ax HEW80_Nss1,(MCS0)_3TX	76.2M	77.481M	77M5D1D	75.24M	77.121M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

**Test Mode: Mode 1
Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	26.76M	16.942M	24.42M	16.852M		
5200MHz	Pass	Inf	39.84M	24.138M	40.98M	25.127M		
5240MHz	Pass	Inf	34.11M	17.571M	37.23M	19.04M		
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	16.32M	19.64M	16.35M	17.631M	16.32M	20.48M
5785MHz	Pass	500k	16.32M	21.889M	16.35M	18.711M	16.26M	22.369M
5825MHz	Pass	500k	16.47M	22.549M	16.32M	18.171M	16.44M	22.999M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	23.58M	17.991M	22.17M	17.901M		
5200MHz	Pass	Inf	42.12M	23.988M	43.02M	24.948M		
5240MHz	Pass	Inf	34.65M	18.591M	37.23M	19.82M		
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	17.52M	20.06M	17.58M	18.411M	17.55M	20.66M
5785MHz	Pass	500k	17.49M	20.48M	17.58M	18.891M	17.55M	21.889M
5825MHz	Pass	500k	17.55M	20.66M	17.55M	18.321M	17.55M	21.289M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	36.462M	39.9M	36.342M		
5230MHz	Pass	Inf	72.96M	37.061M	76.32M	37.961M		
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	36.06M	63.268M	36.36M	45.337M	36.3M	59.37M
5795MHz	Pass	500k	36M	62.669M	36.36M	42.279M	36.36M	59.13M
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.96M	75.802M	81.36M	75.682M		
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.72M	76.522M	75.96M	76.042M	75.72M	76.282M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	24.33M	19.13M	22.77M	19.1M		
5200MHz	Pass	Inf	41.16M	22.459M	42.09M	23.838M		
5240MHz	Pass	Inf	37.68M	19.43M	41.01M	20.3M		
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	18.81M	21.769M	18.51M	19.43M	18.9M	21.739M
5785MHz	Pass	500k	18.78M	26.597M	18.72M	22.129M	18.69M	27.886M
5825MHz	Pass	500k	18.96M	21.109M	18.96M	19.37M	18.9M	21.319M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.08M	37.481M	39.84M	37.541M		
5230MHz	Pass	Inf	68.16M	37.901M	81.6M	42.099M		
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	37.38M	52.234M	36.78M	38.501M	37.62M	52.174M
5795MHz	Pass	500k	37.5M	57.991M	37.62M	40.84M	36.36M	55.532M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	76.762M	81.12M	76.882M		
802.11ax HEW80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-



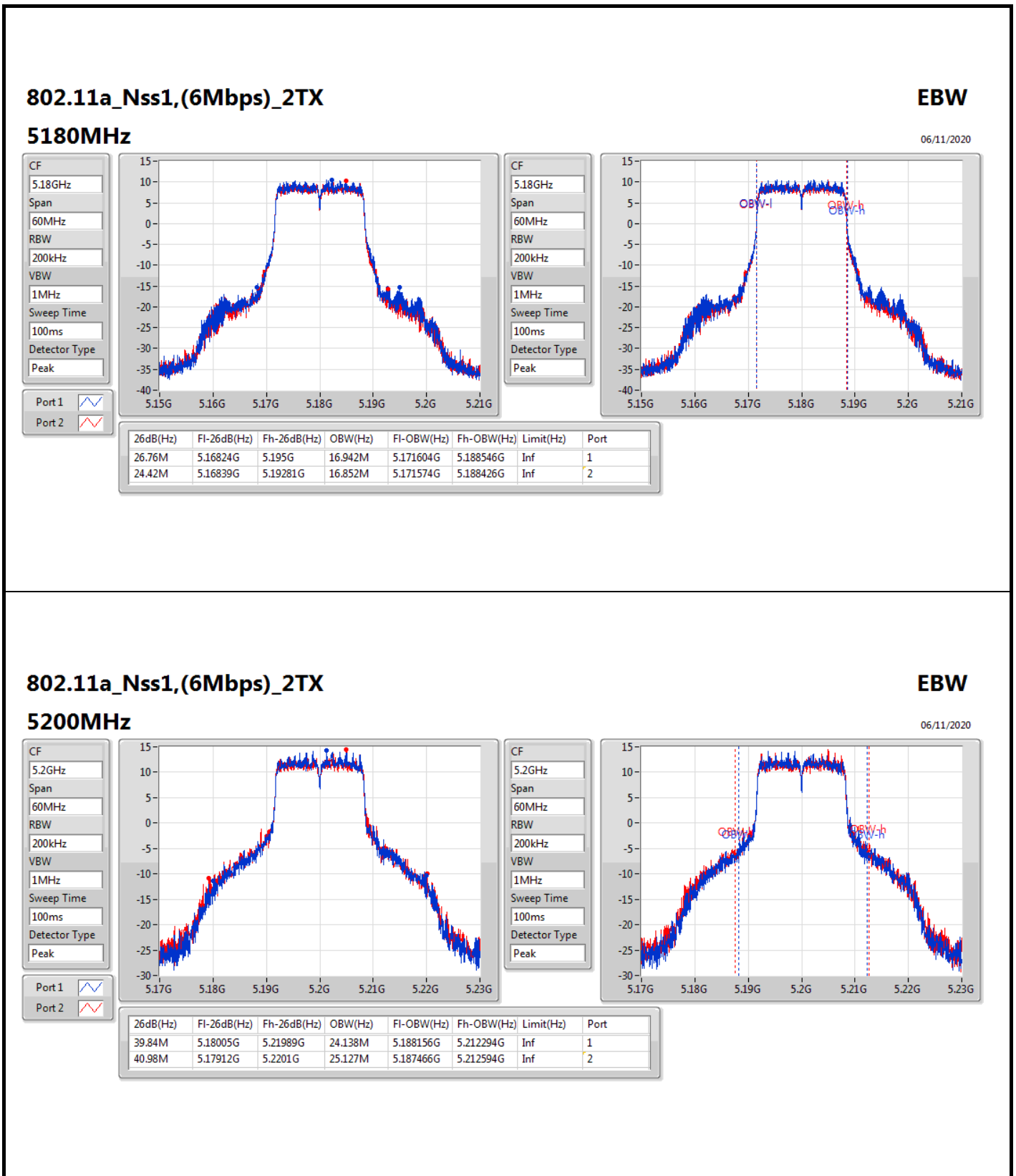
Test Mode: Mode 1

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
5775MHz	Pass	500k	75.24M	77.361M	76.2M	77.121M	75.24M	77.481M

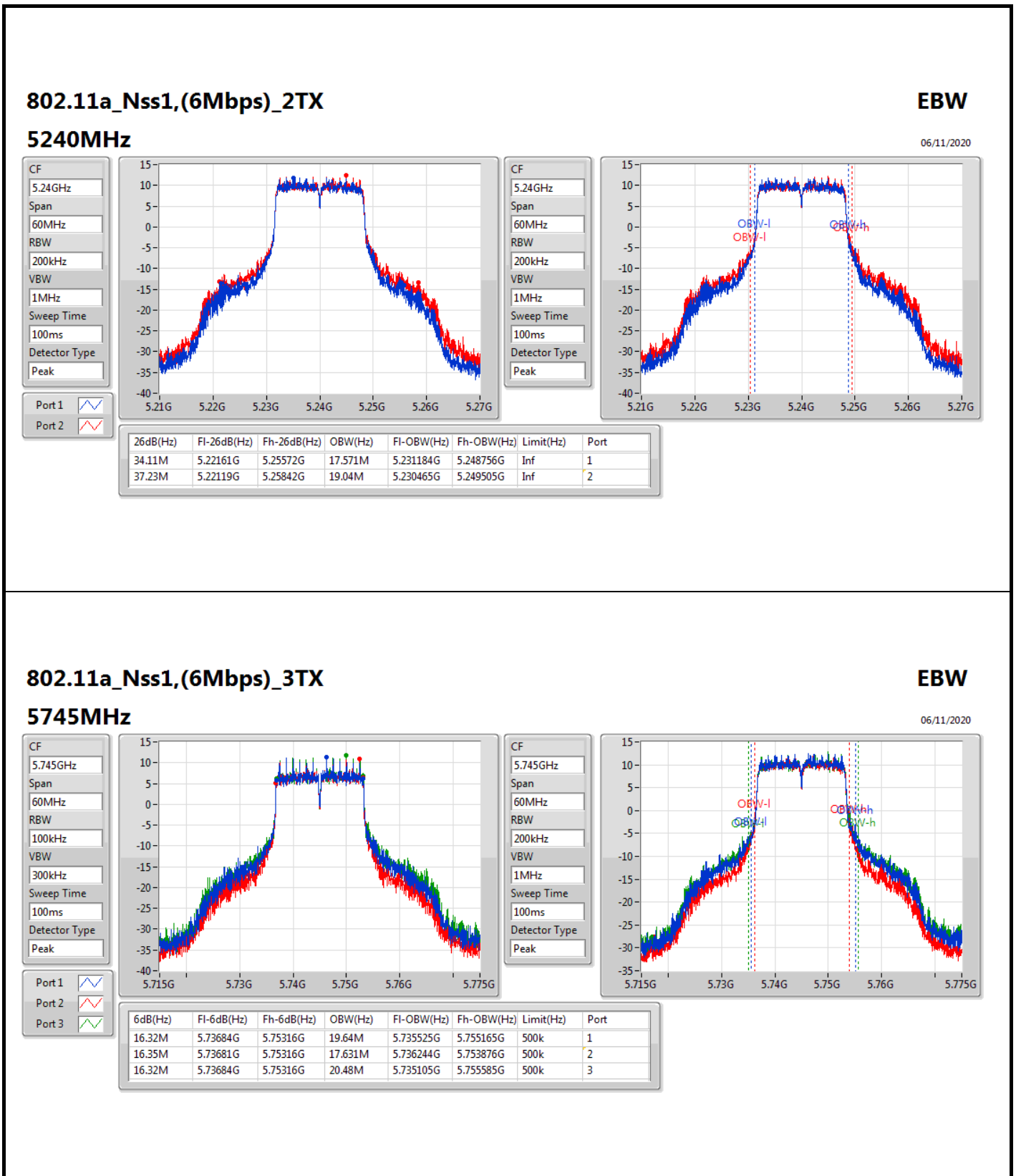
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

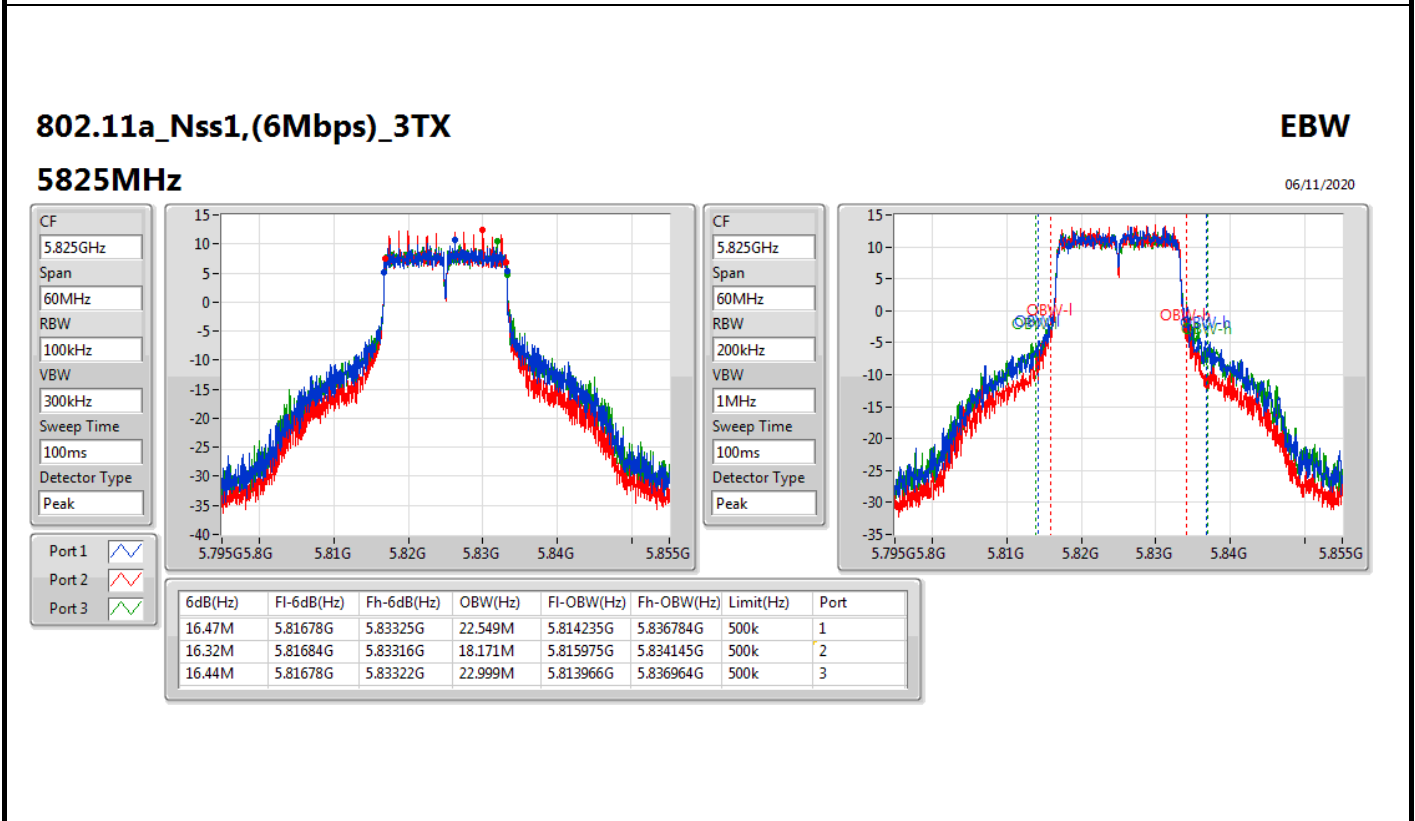
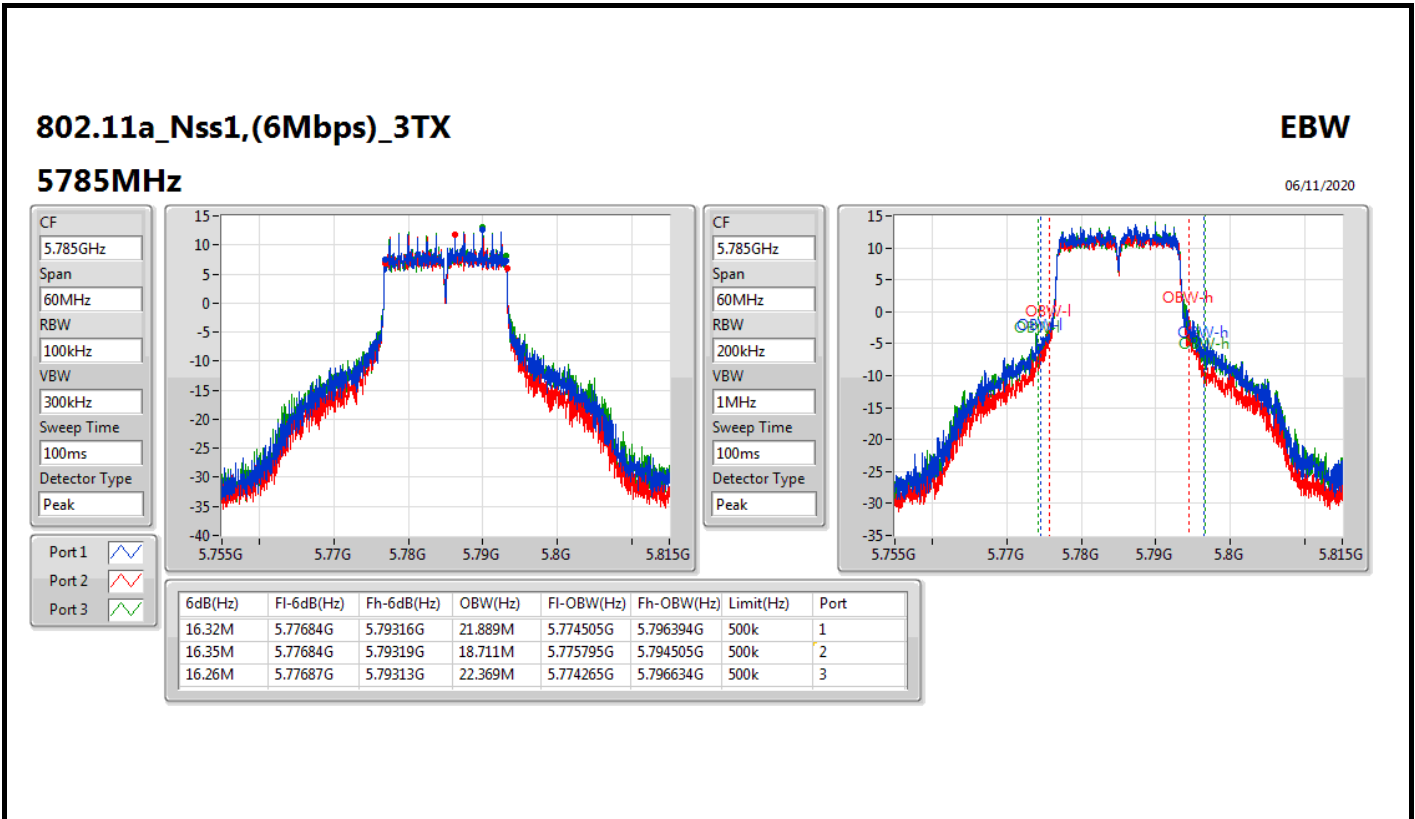
Test Mode: Mode 1



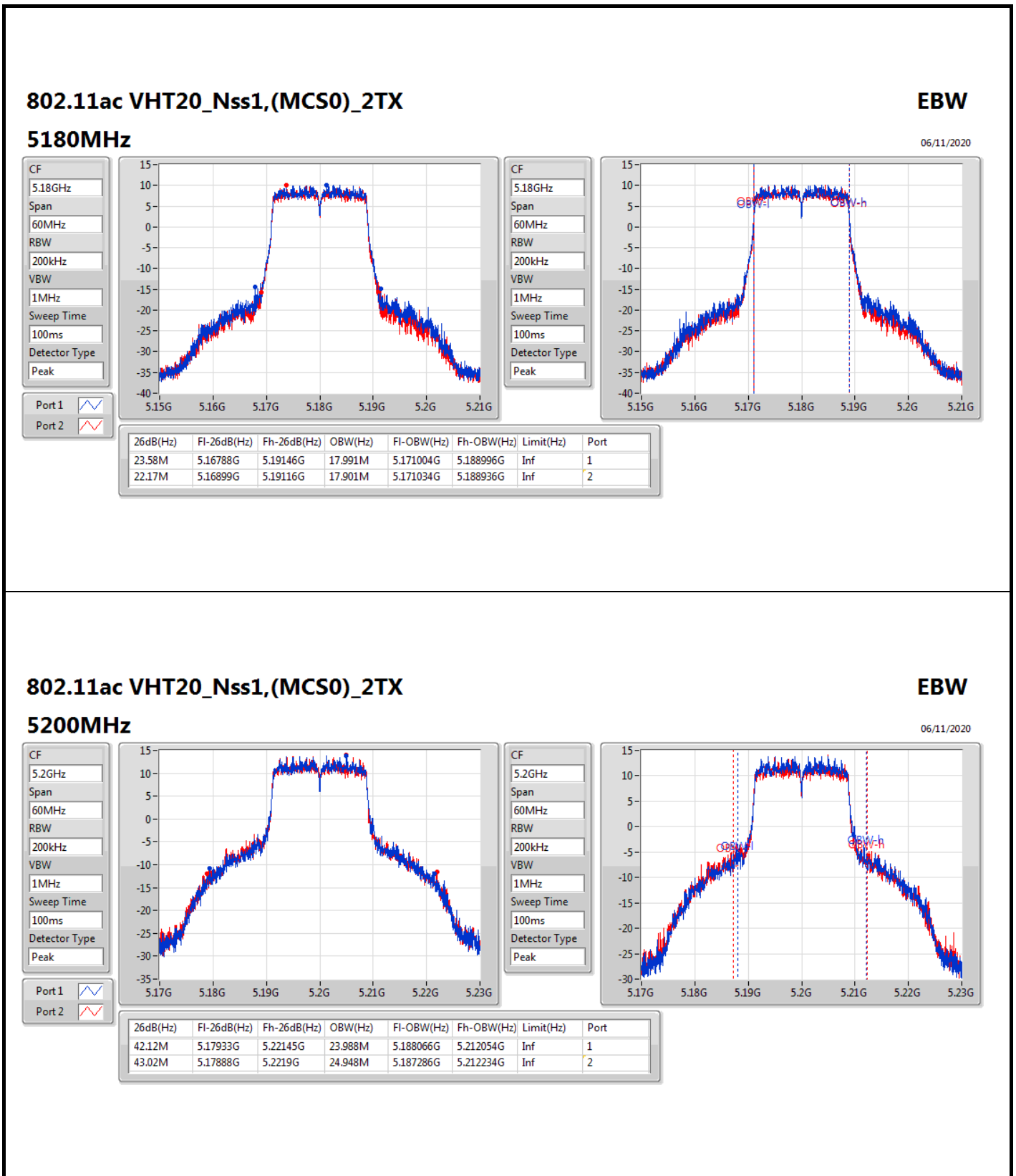
Test Mode: Mode 1



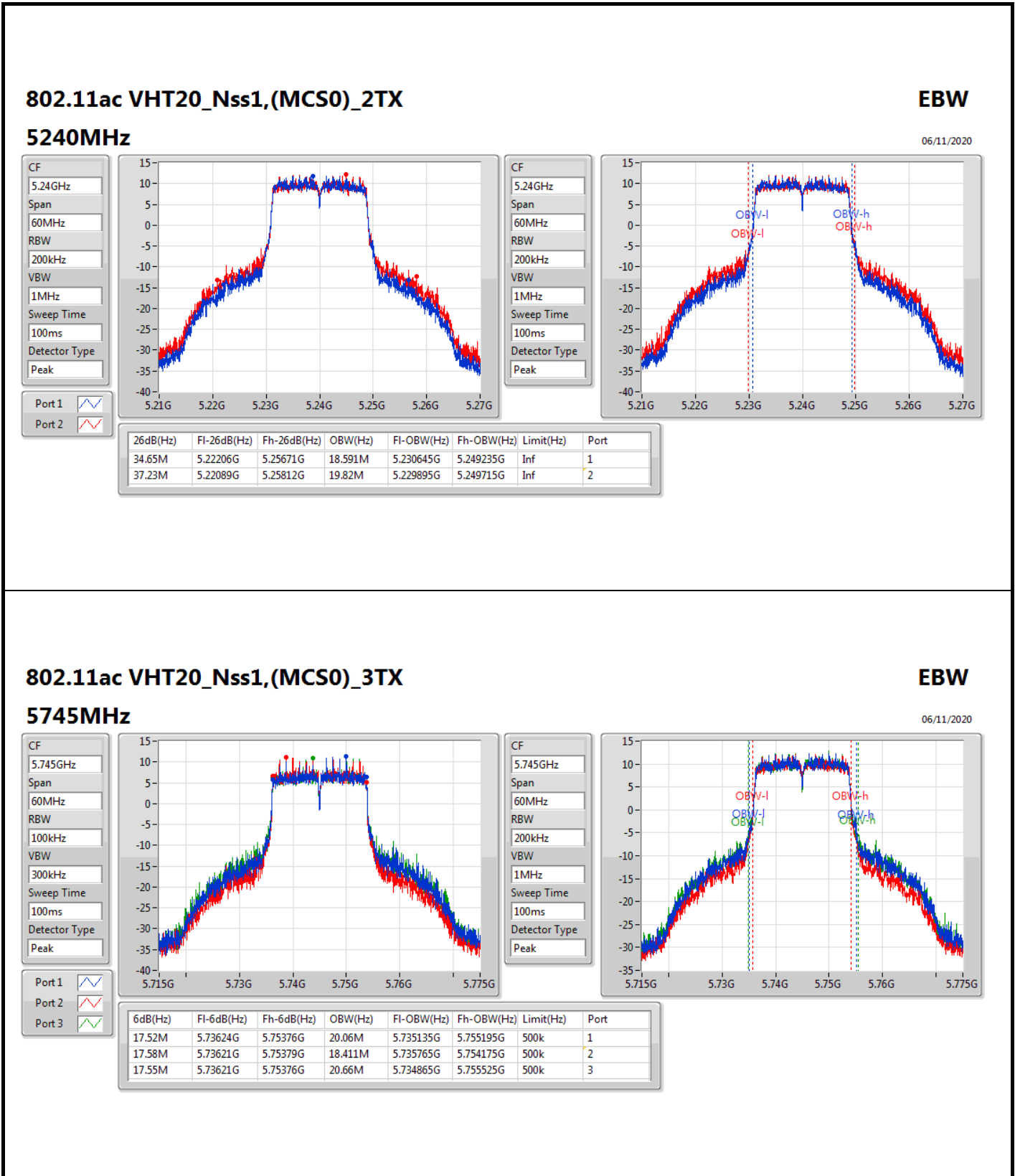
Test Mode: Mode 1



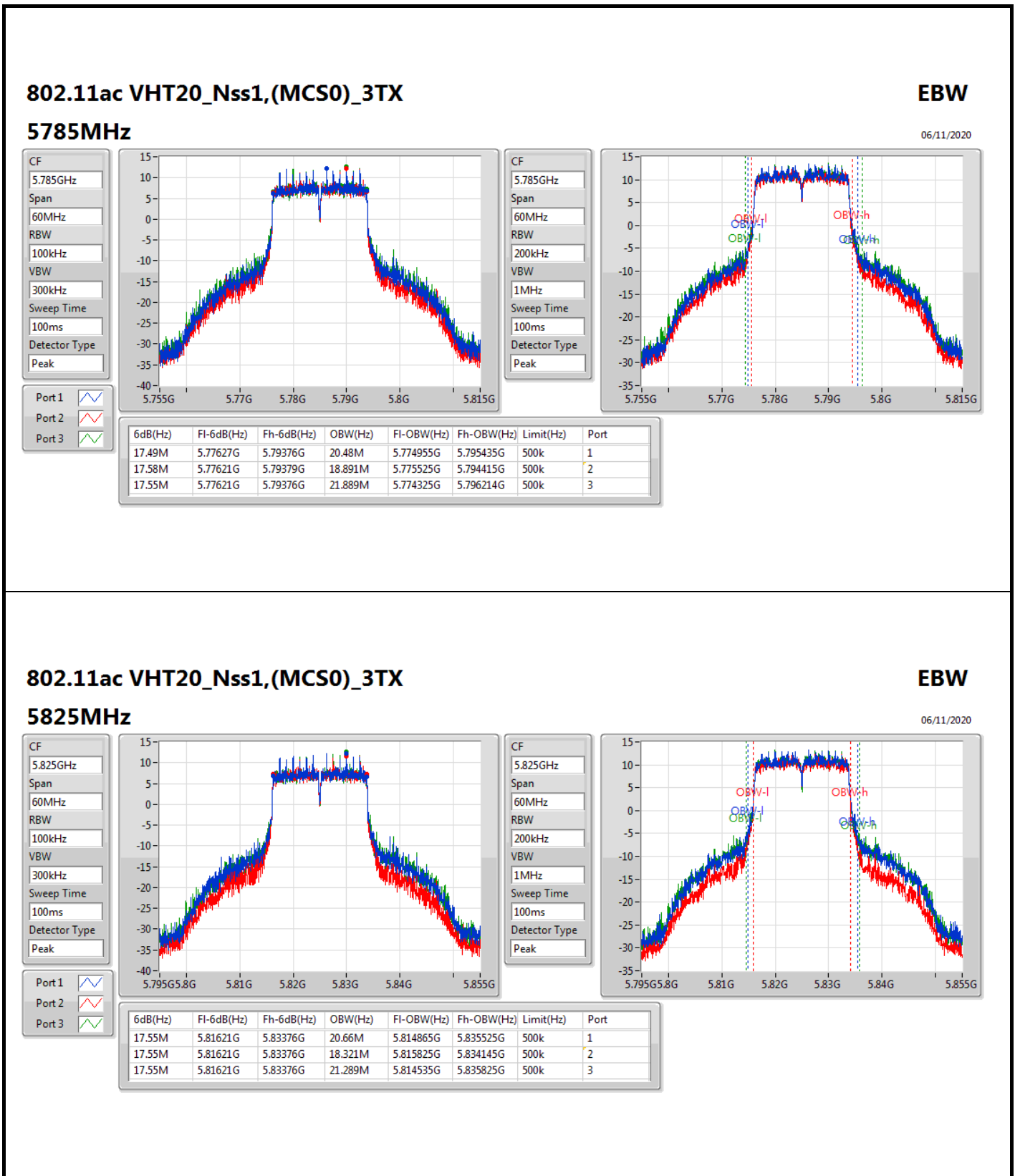
Test Mode: Mode 1



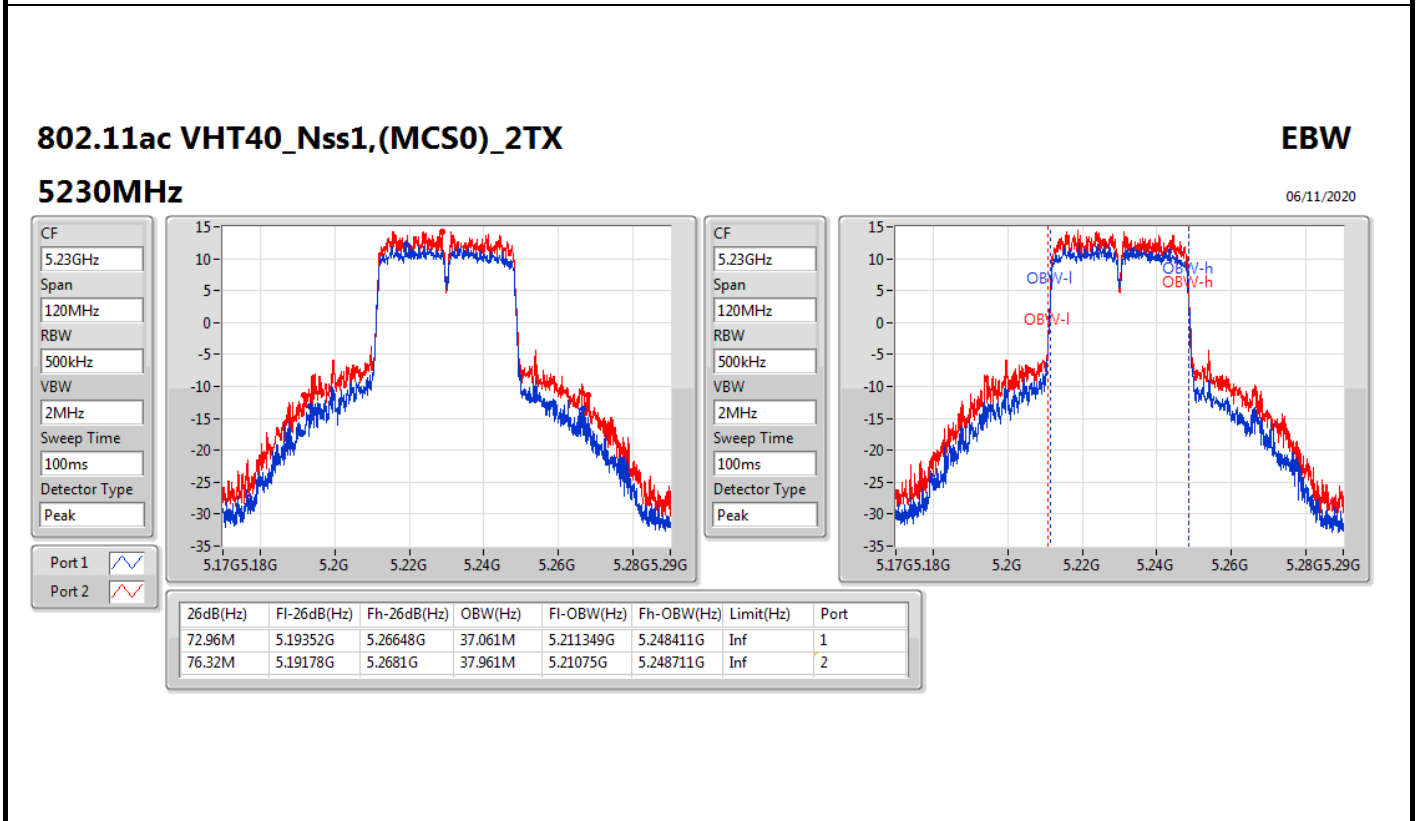
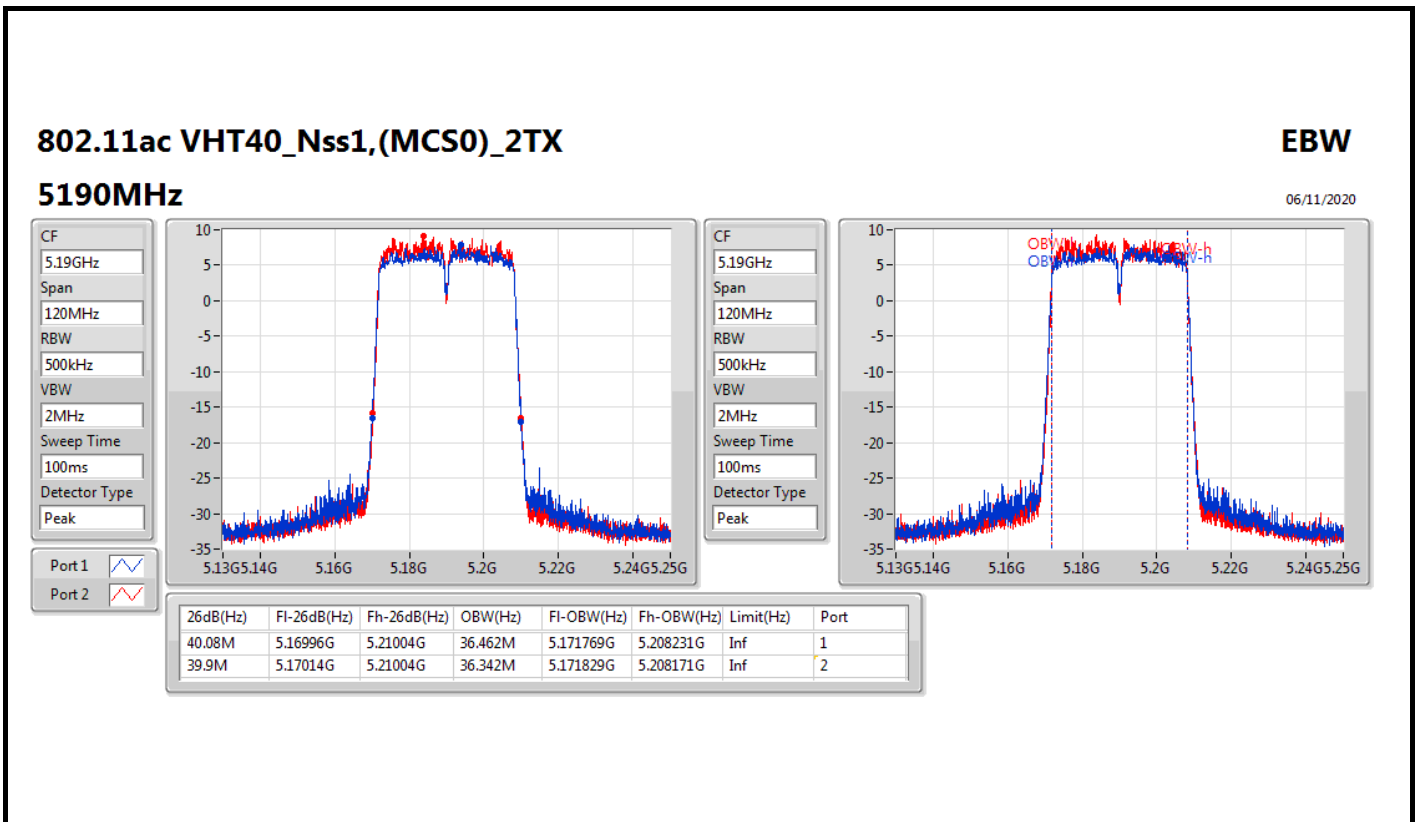
Test Mode: Mode 1



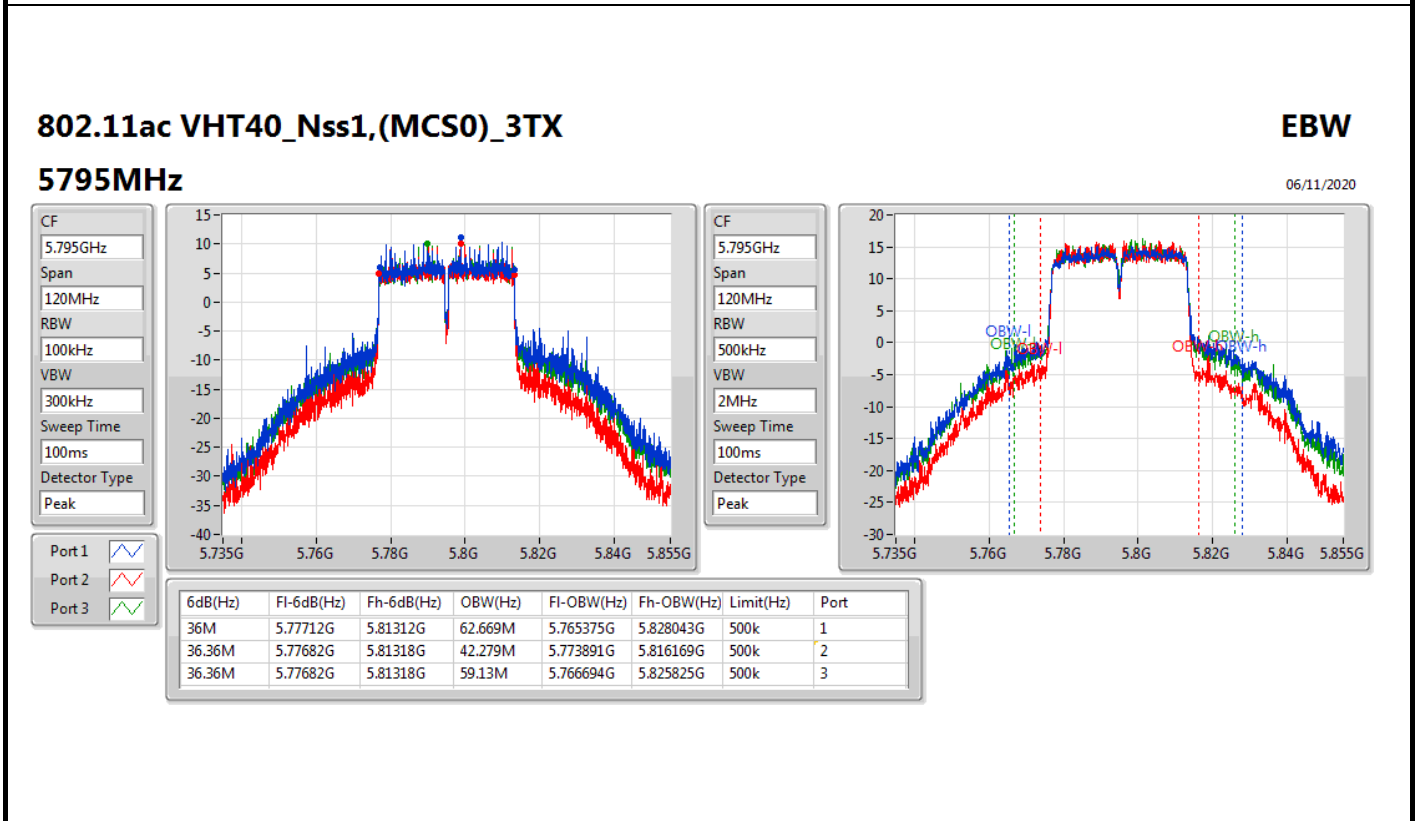
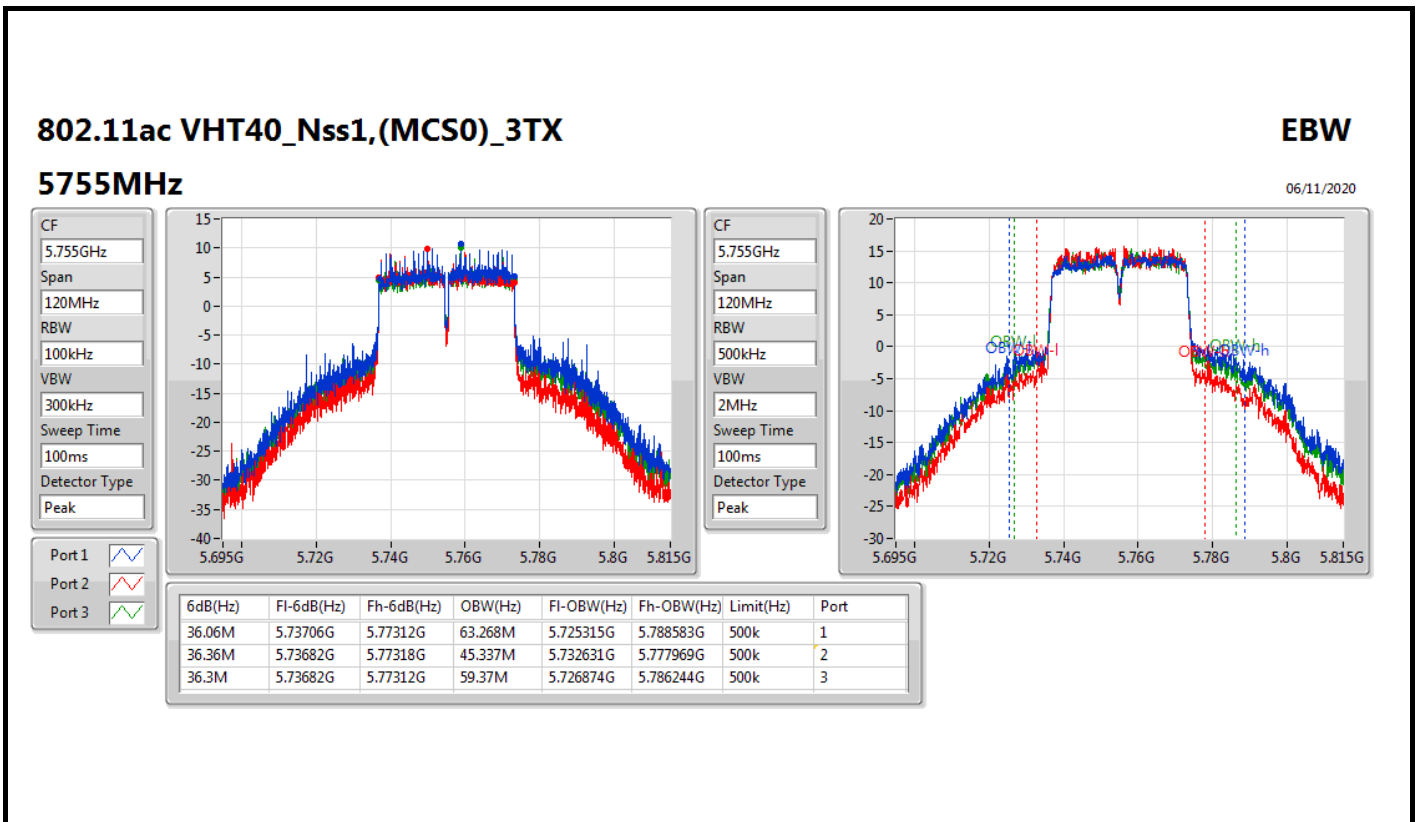
Test Mode: Mode 1



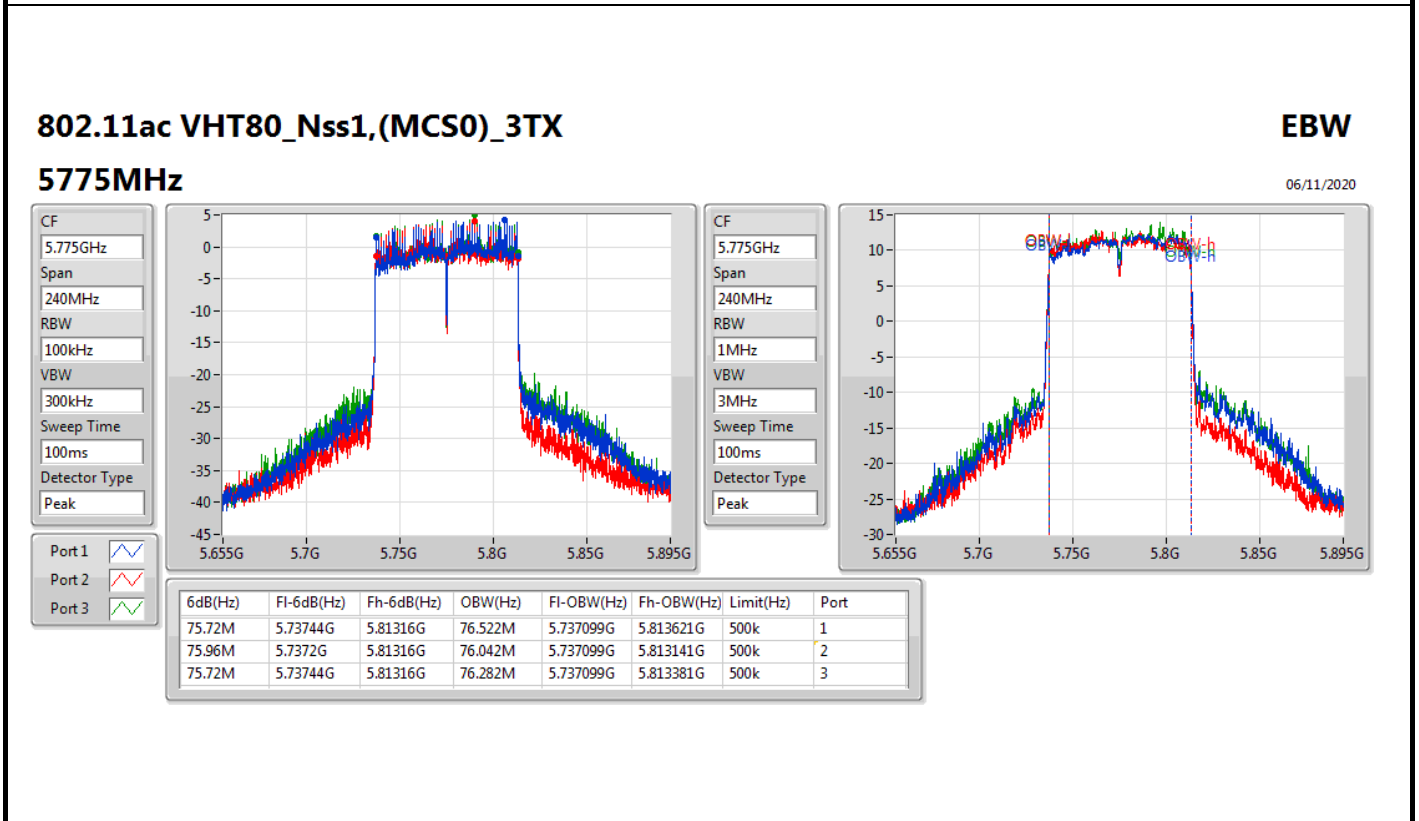
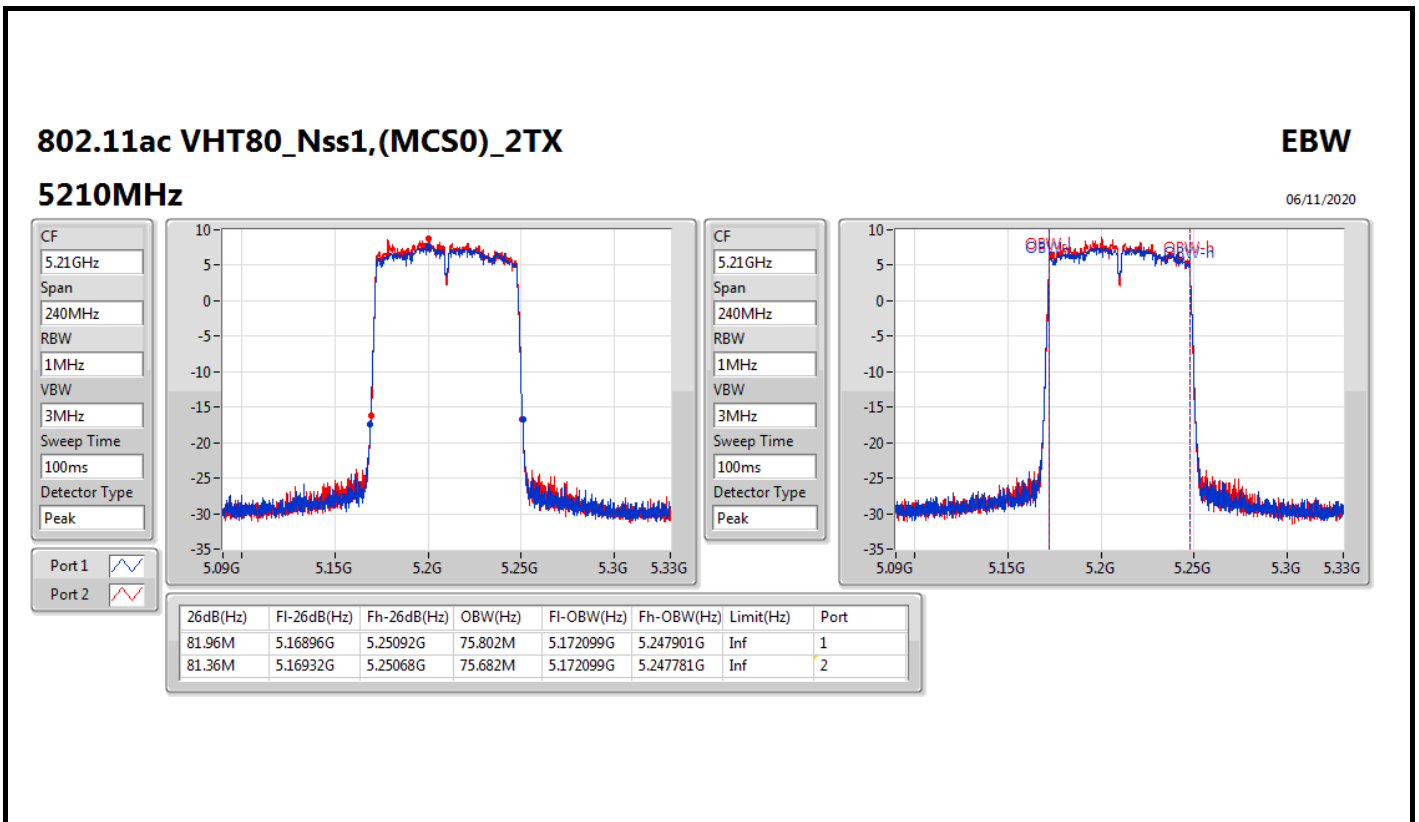
Test Mode: Mode 1



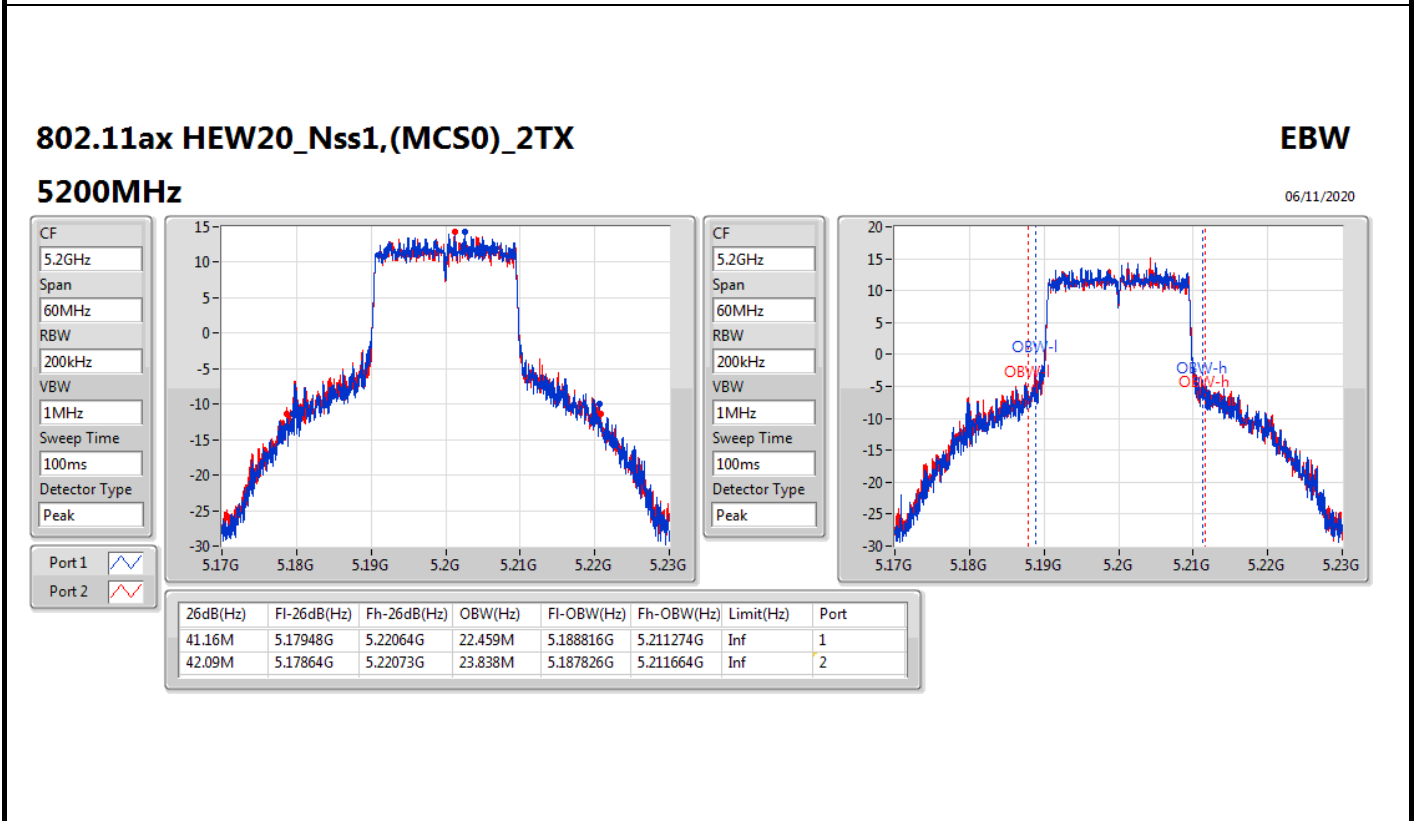
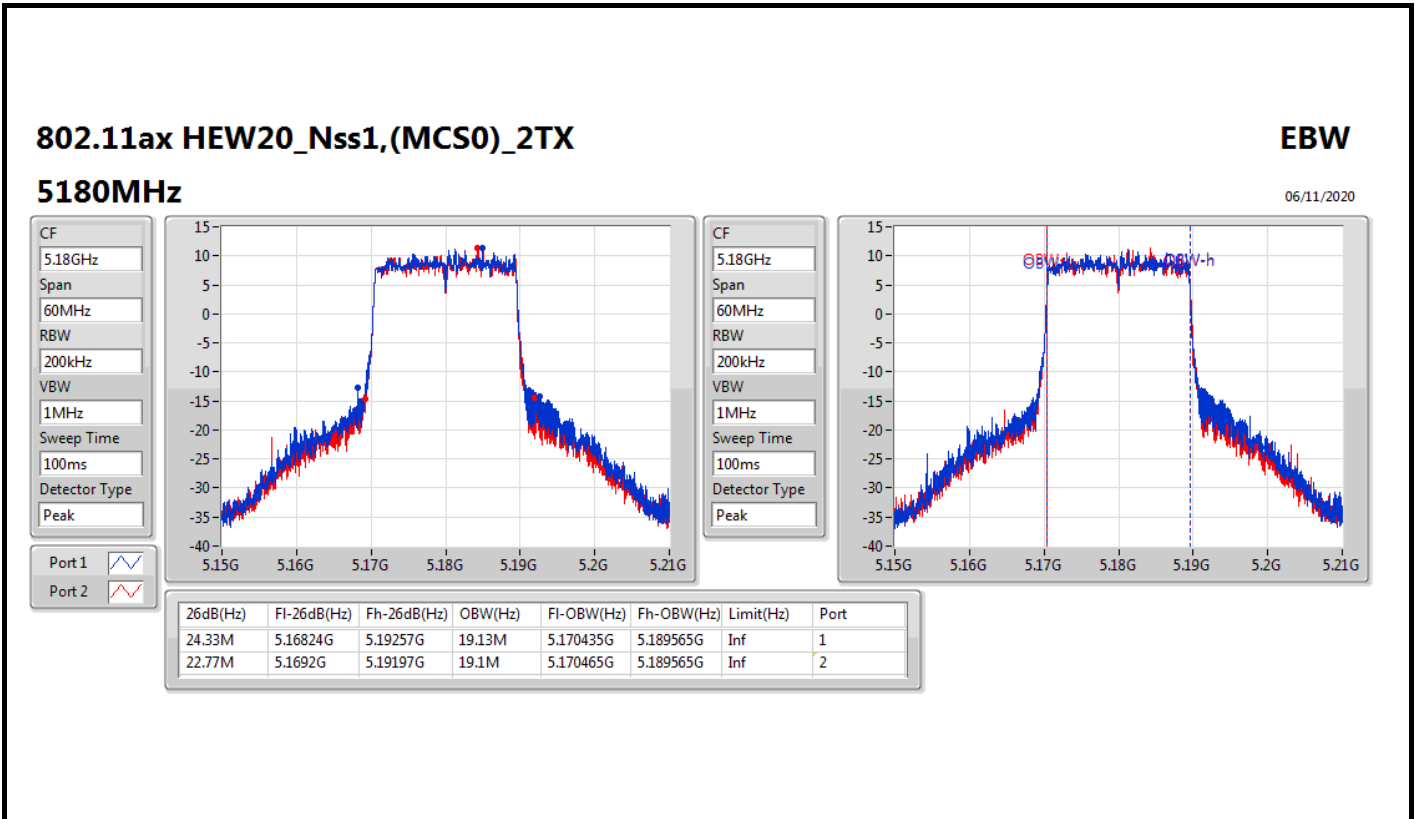
Test Mode: Mode 1



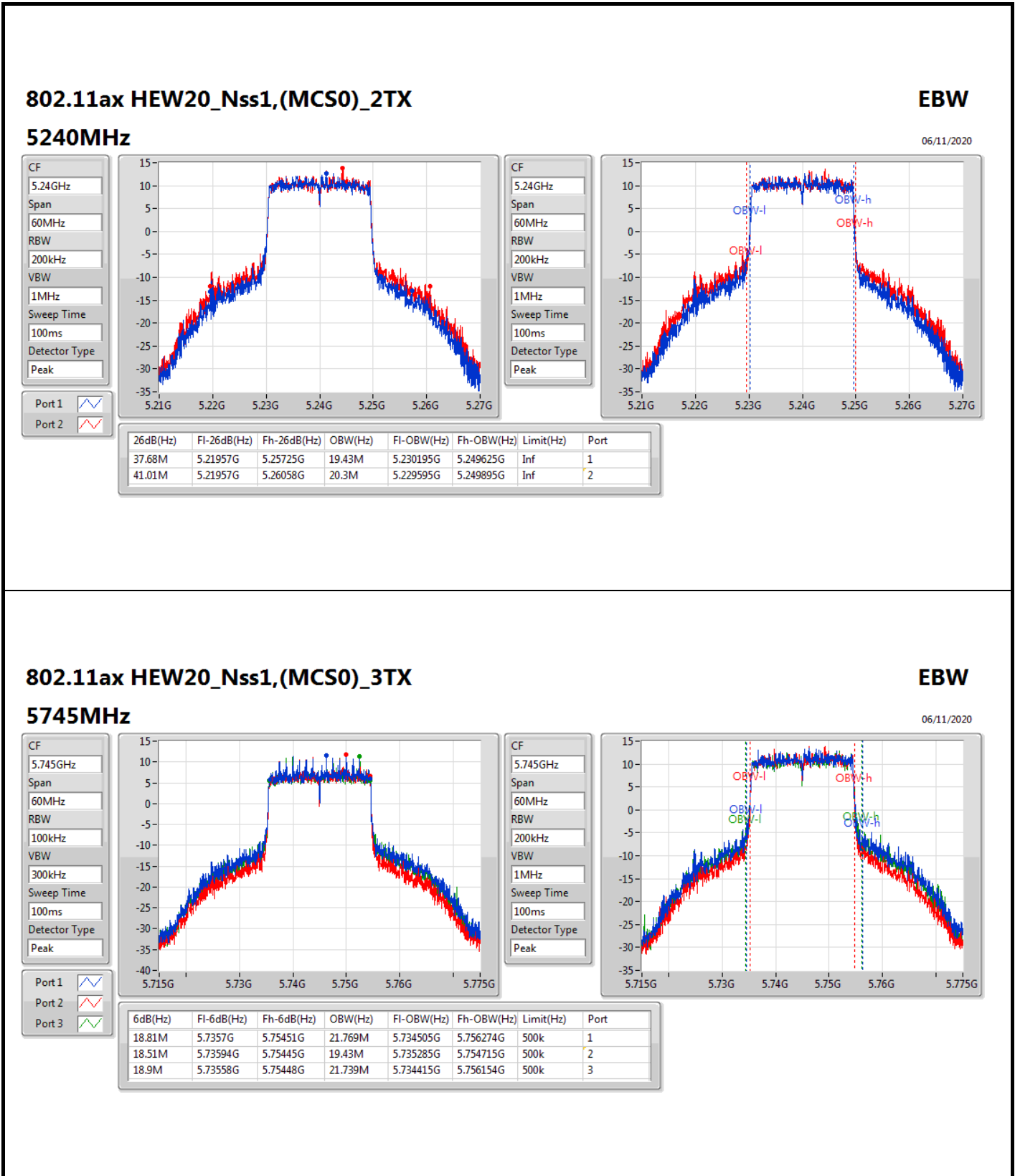
Test Mode: Mode 1



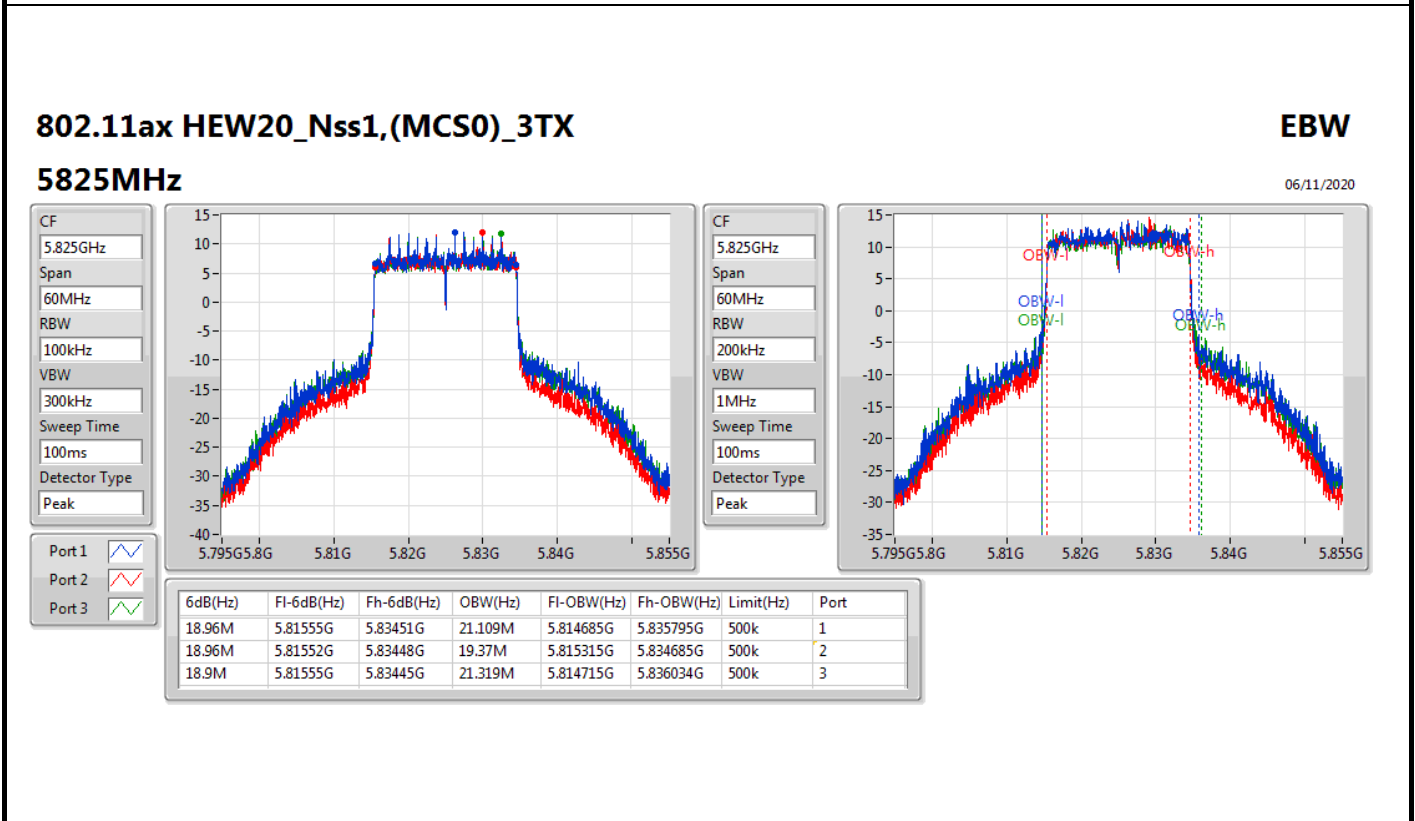
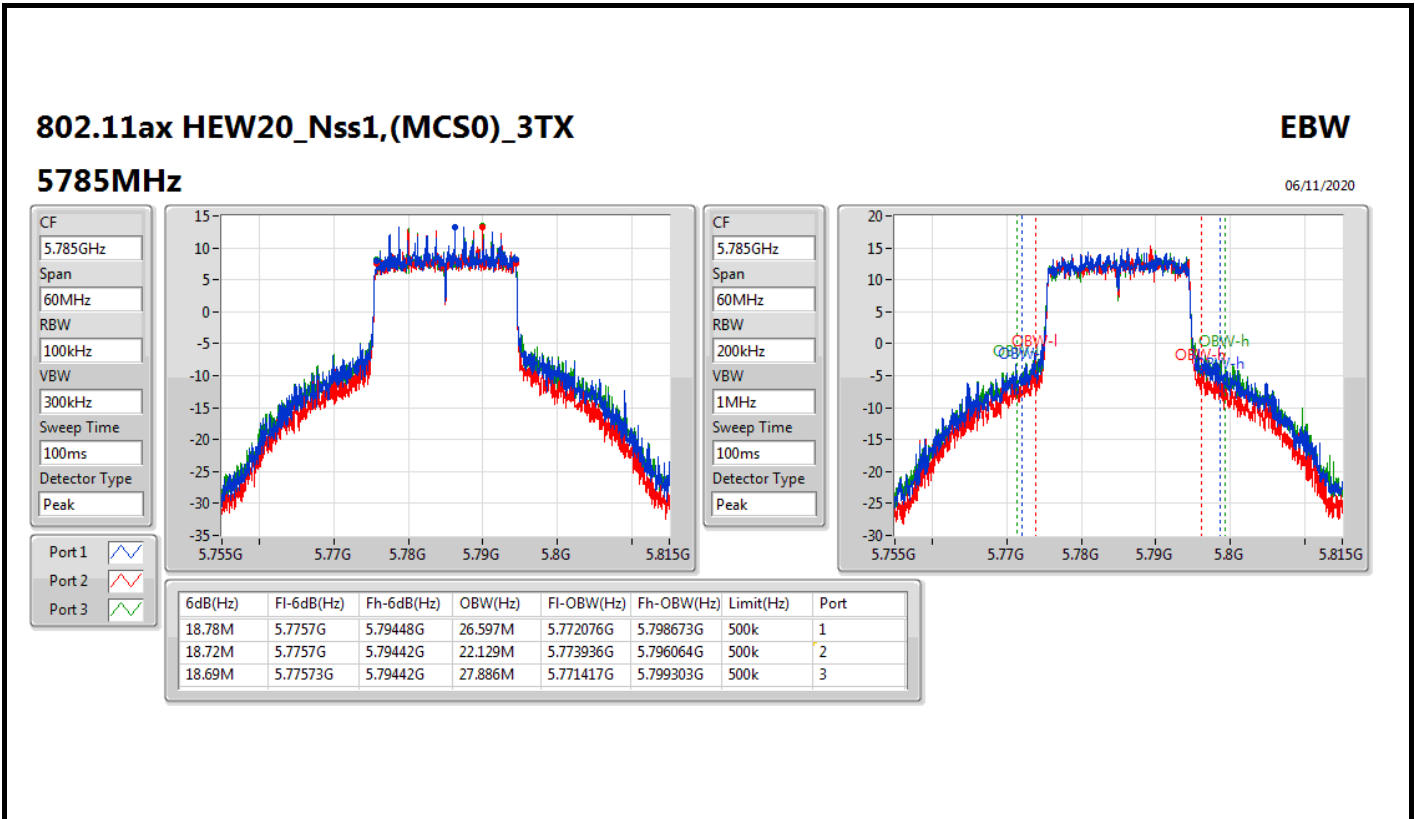
Test Mode: Mode 1



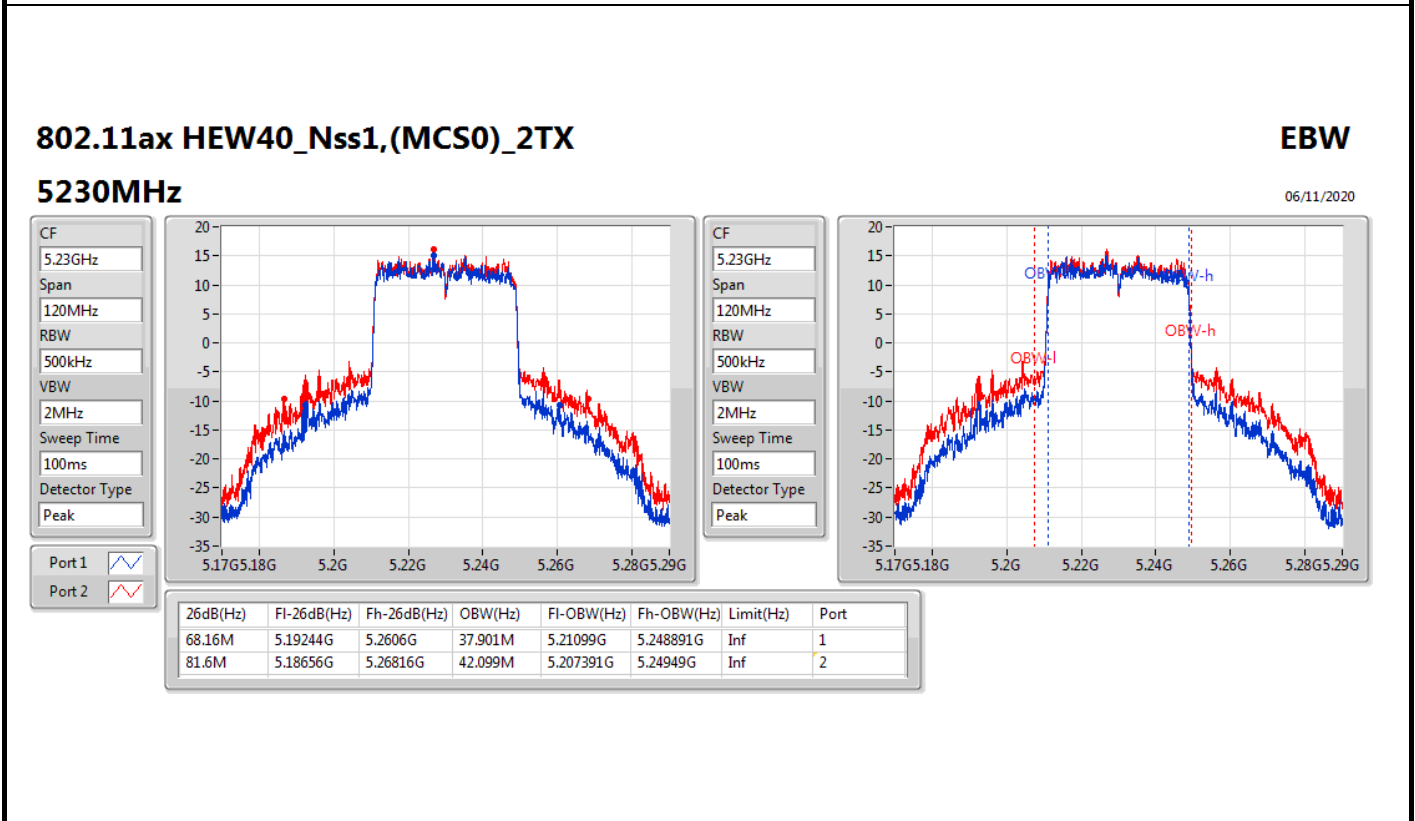
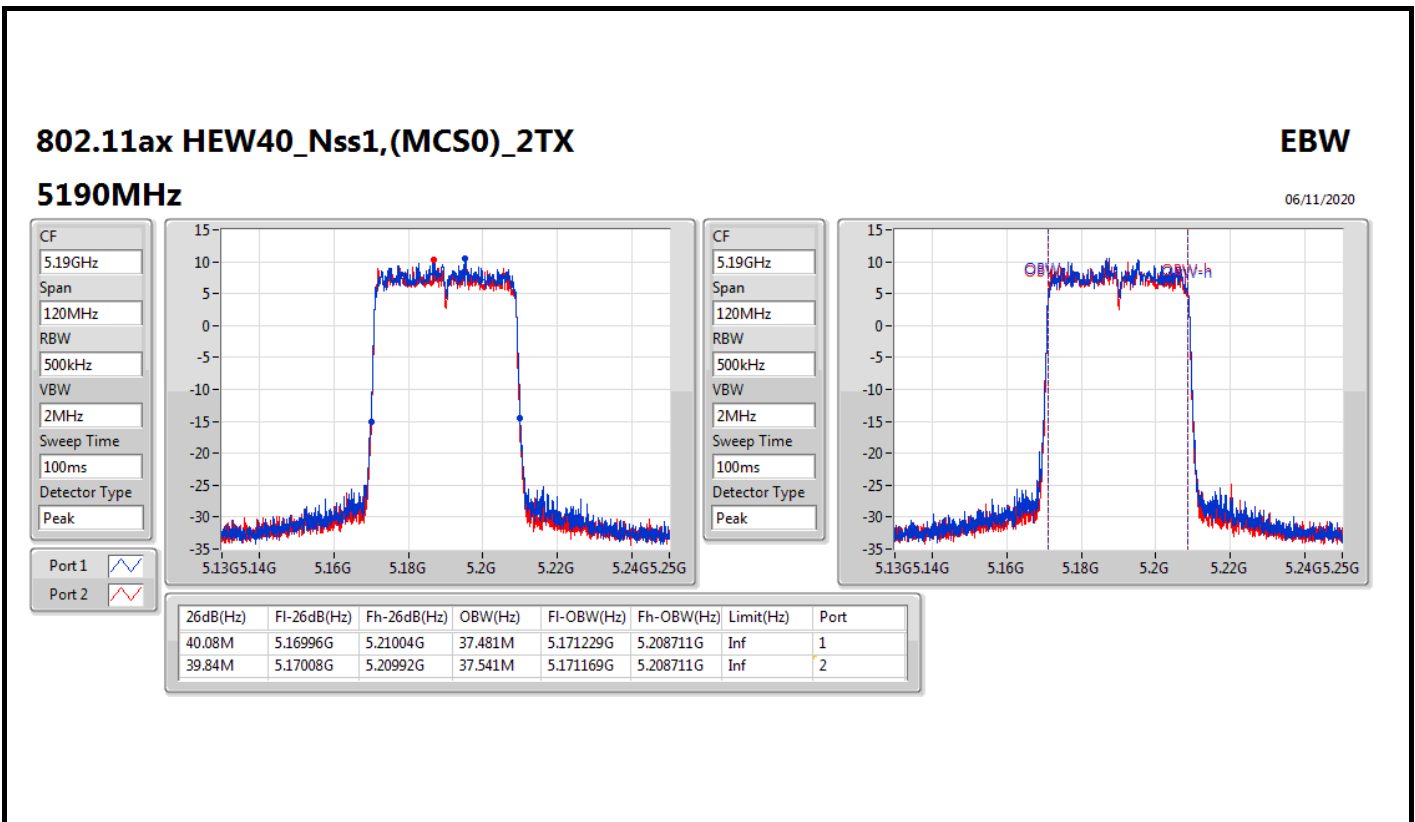
Test Mode: Mode 1



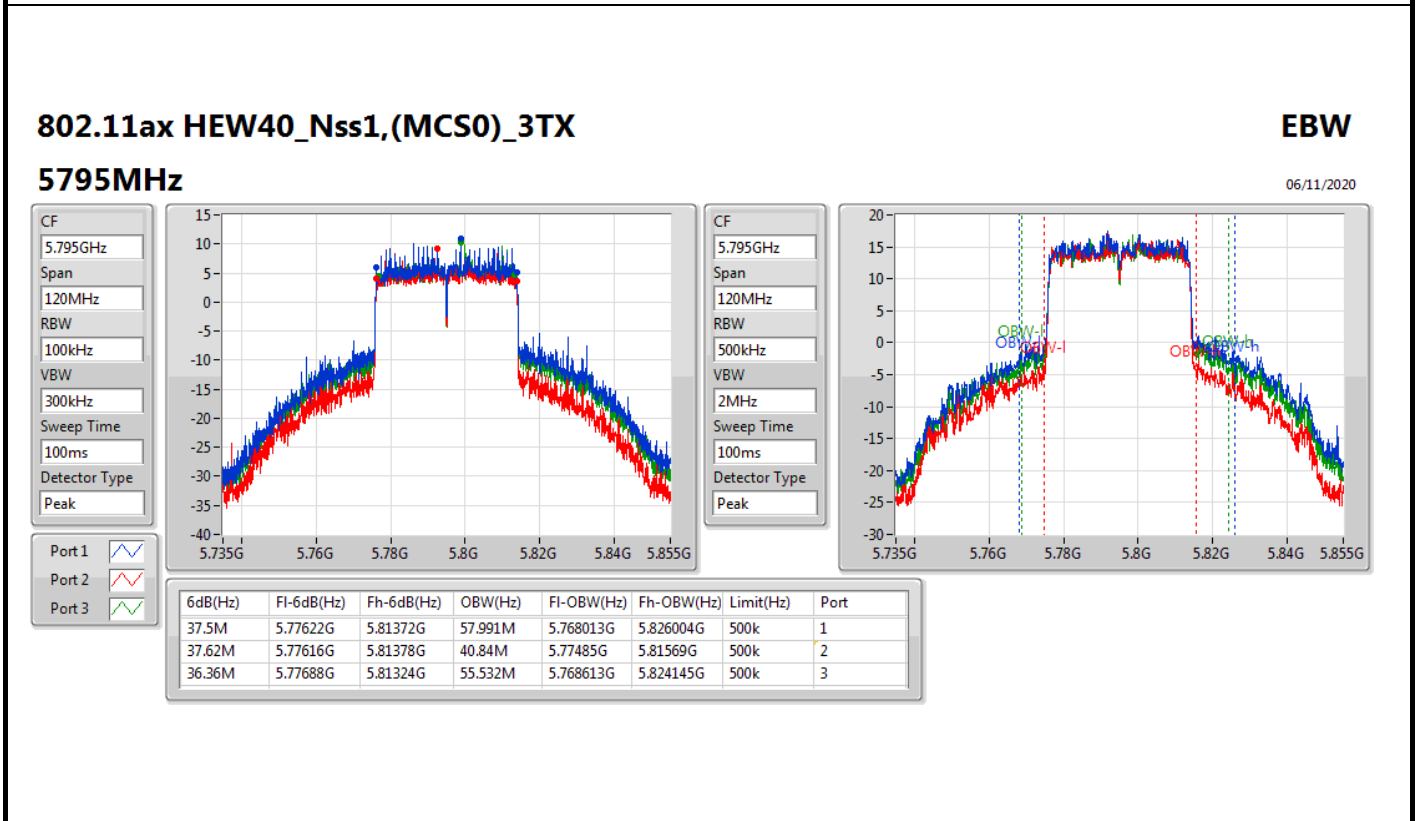
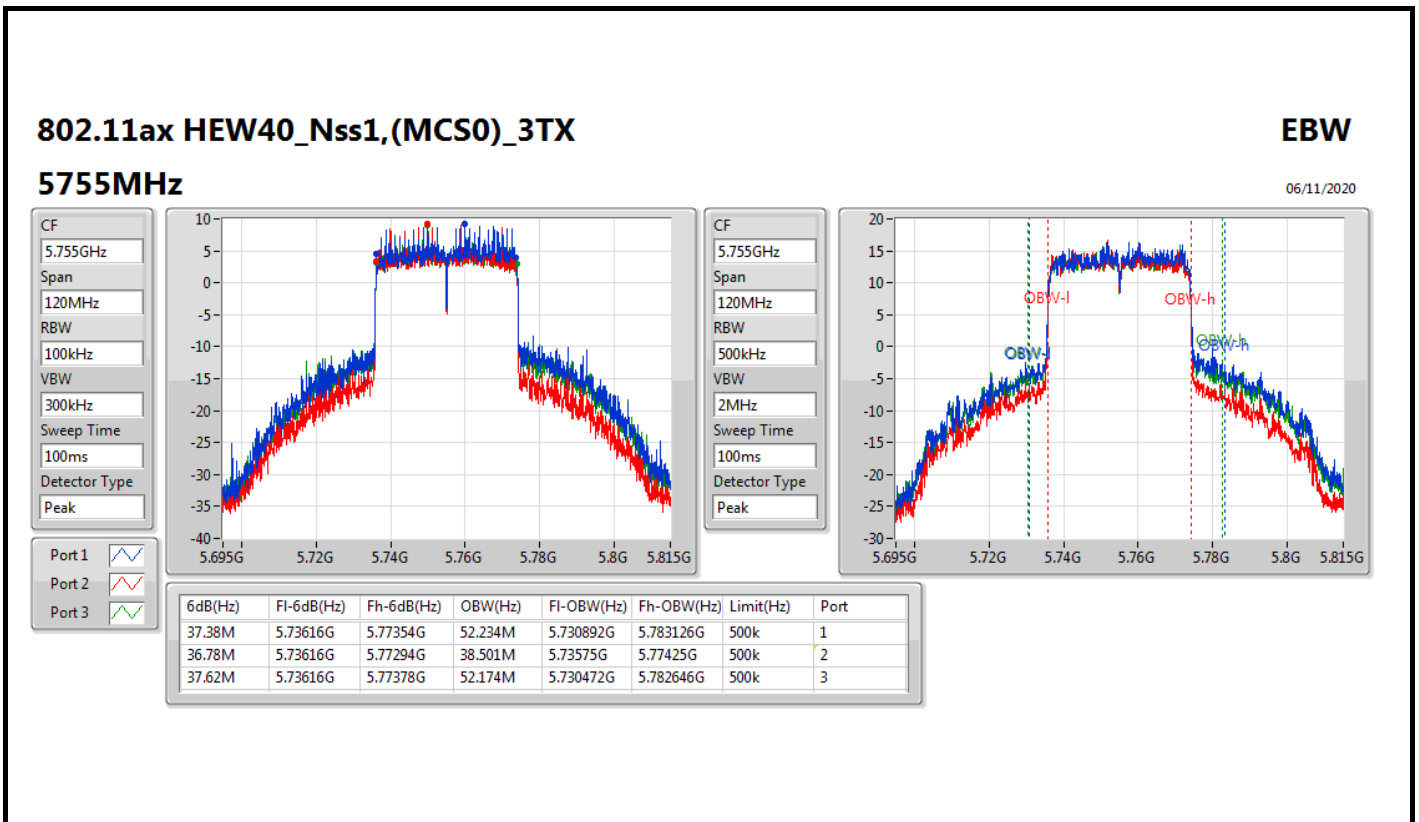
Test Mode: Mode 1



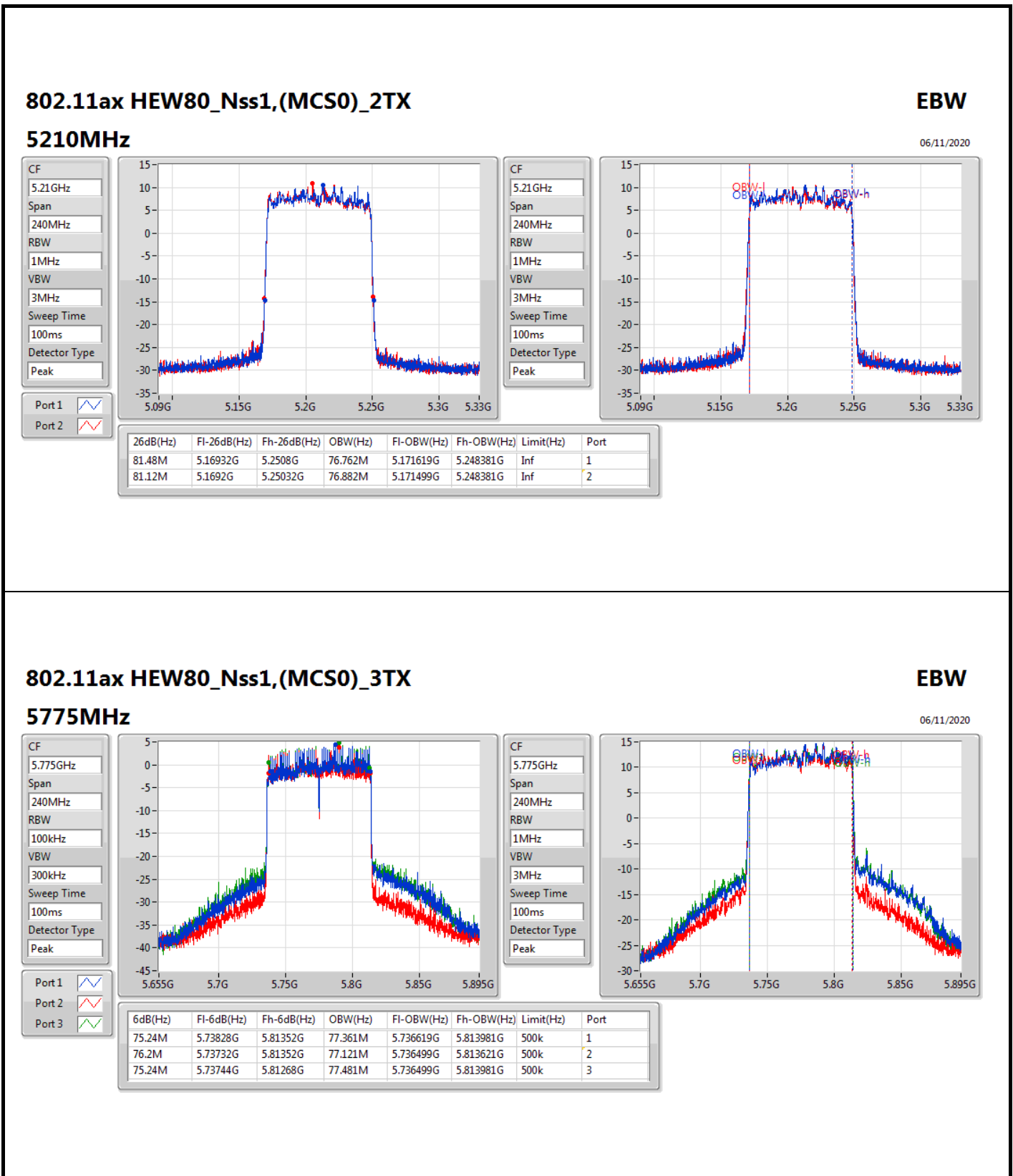
Test Mode: Mode 1



Test Mode: Mode 1



Test Mode: Mode 1



**Test Mode: Mode 2
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	45.81M	30.075M	30M1D1D	28.44M	18.081M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	77.34M	40.3M	40M3D1D	39.9M	36.342M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	81.84M	75.802M	75M8D1D	81.36M	75.682M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	44.01M	26.267M	26M3D1D	23.34M	19.1M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	81.6M	41.499M	41M5D1D	39.96M	37.481M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	81.6M	76.762M	76M8D1D	81.48M	76.762M
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	17.58M	21.709M	21M7D1D	17.55M	18.171M
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	36.36M	65.127M	65M1D1D	36.06M	45.697M
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	76.32M	76.762M	76M8D1D	75.72M	76.162M
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	18.99M	32.354M	32M4D1D	18.48M	24.768M
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	37.62M	60.45M	60M4D1D	35.94M	39.1M
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	77.28M	77.601M	77M6D1D	76.08M	77.121M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

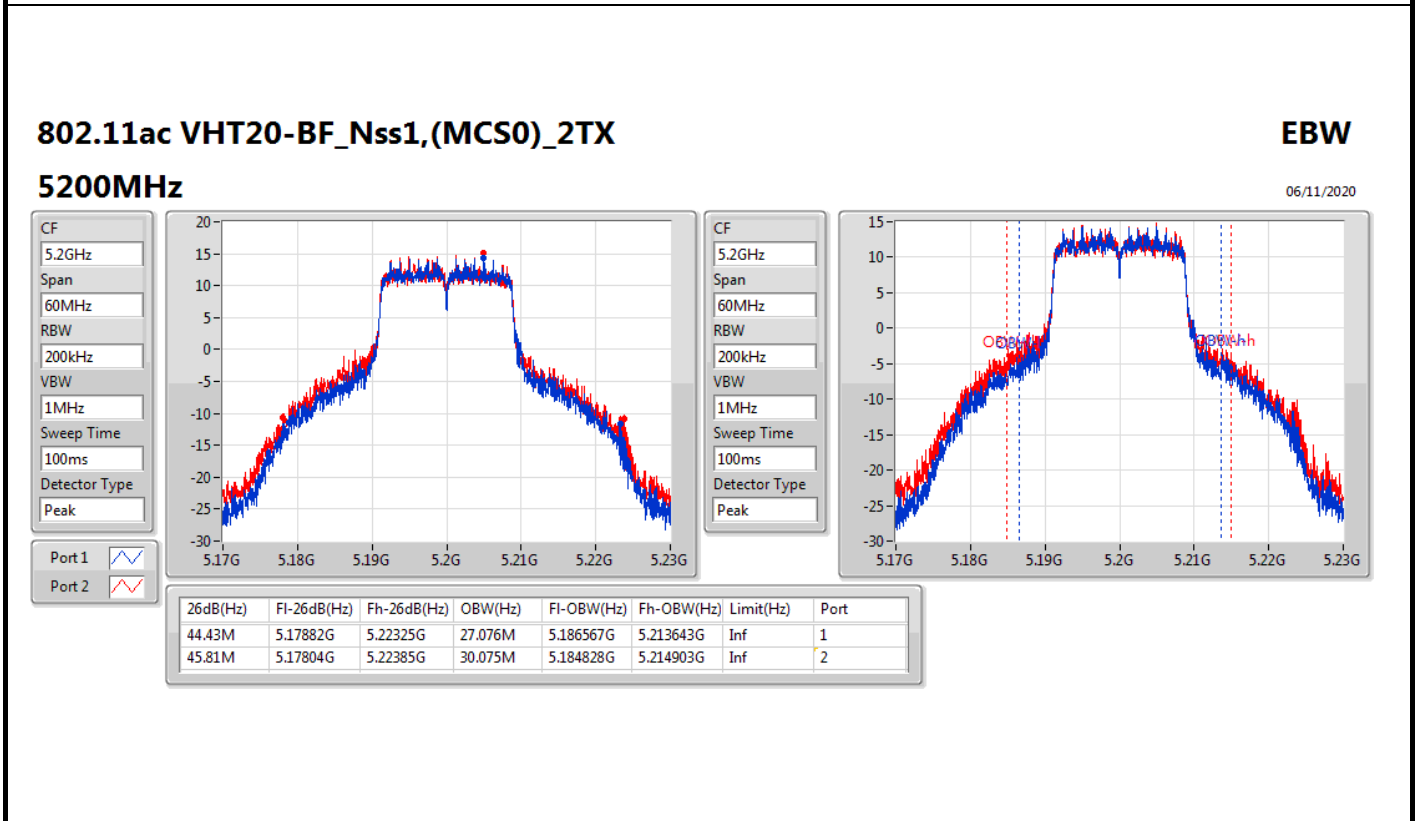
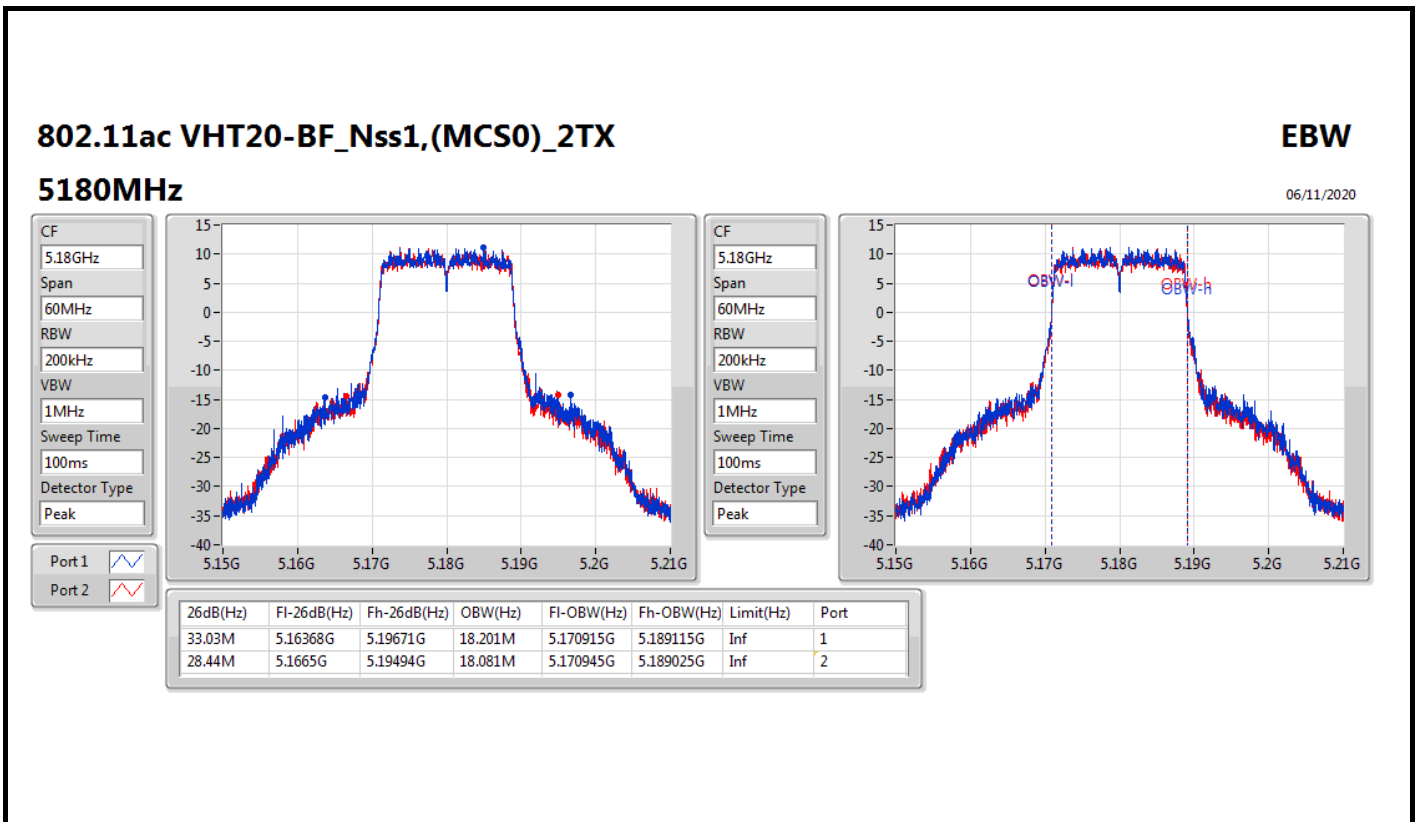


**Test Mode: Mode 2
Result**

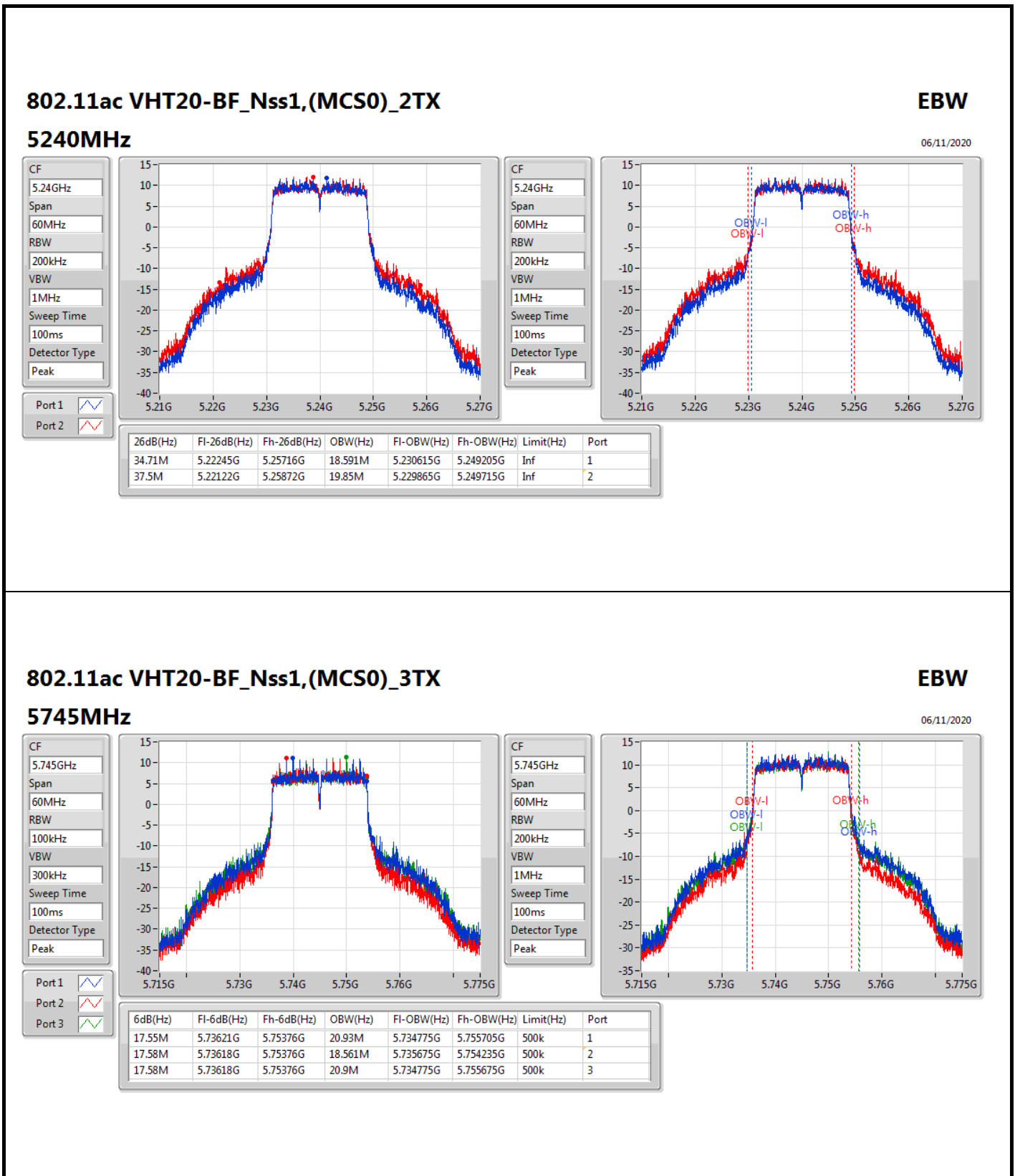
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	33.03M	18.201M	28.44M	18.081M		
5200MHz	Pass	Inf	44.43M	27.076M	45.81M	30.075M		
5240MHz	Pass	Inf	34.71M	18.591M	37.5M	19.85M		
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	17.55M	20.93M	17.58M	18.561M	17.58M	20.9M
5785MHz	Pass	500k	17.55M	20.42M	17.58M	18.981M	17.55M	21.709M
5825MHz	Pass	500k	17.58M	19.37M	17.58M	18.171M	17.55M	19.22M
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	36.462M	39.9M	36.342M		
5230MHz	Pass	Inf	73.08M	37.181M	77.34M	40.3M		
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	36.06M	63.868M	36.3M	45.697M	36.3M	59.43M
5795MHz	Pass	500k	36.24M	65.127M	36.36M	47.556M	36.3M	61.109M
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.84M	75.802M	81.36M	75.682M		
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.72M	76.762M	76.32M	76.162M	75.72M	76.642M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz	Pass	Inf	25.56M	19.1M	23.34M	19.1M		
5200MHz	Pass	Inf	44.01M	25.187M	43.95M	26.267M		
5240MHz	Pass	Inf	37.71M	19.43M	41.13M	20.36M		
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5745MHz	Pass	500k	18.6M	32.024M	18.75M	27.046M	18.48M	31.934M
5785MHz	Pass	500k	18.93M	31.004M	18.69M	26.897M	18.6M	32.354M
5825MHz	Pass	500k	18.99M	31.154M	18.75M	24.768M	18.54M	30.705M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz	Pass	Inf	40.2M	37.481M	39.96M	37.541M		
5230MHz	Pass	Inf	61.14M	37.901M	81.6M	41.499M		
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5755MHz	Pass	500k	37.62M	55.172M	36.78M	39.1M	37.5M	52.774M
5795MHz	Pass	500k	35.94M	60.45M	36.96M	42.699M	37.5M	57.571M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	76.762M	81.6M	76.762M		
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	76.08M	77.361M	77.28M	77.121M	76.32M	77.601M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
 Port X-OBW = Port X 99% occupied bandwidth;

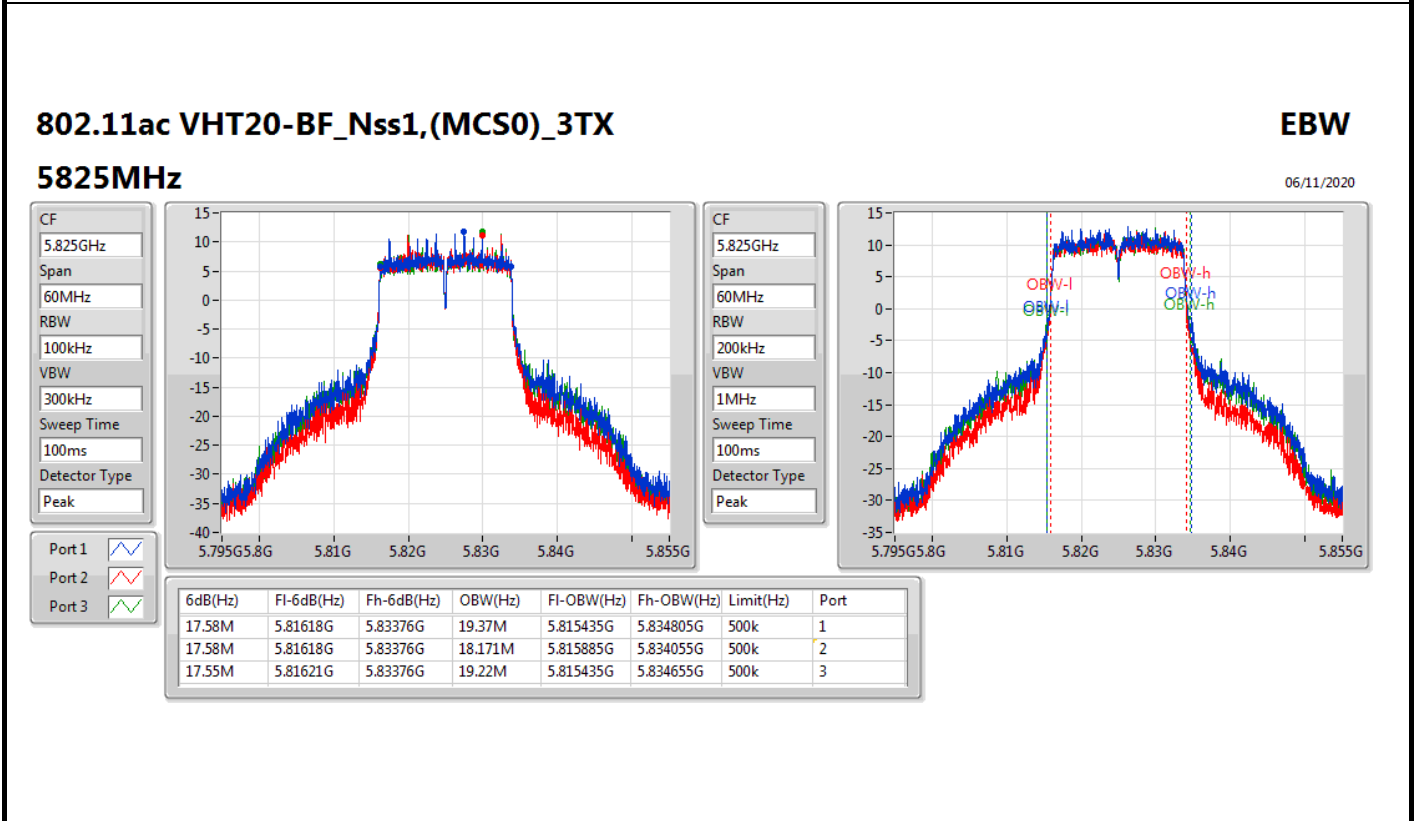
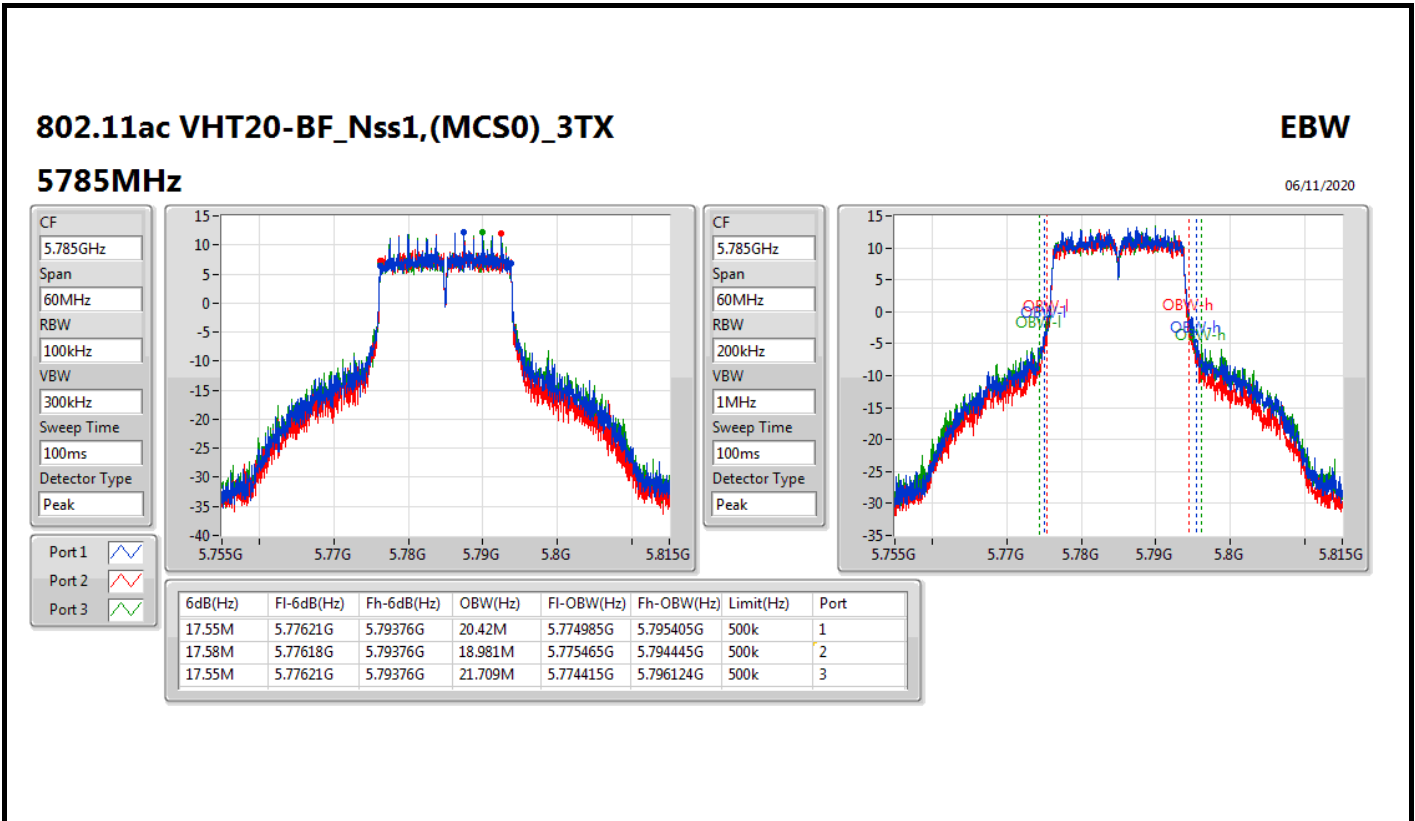
Test Mode: Mode 2



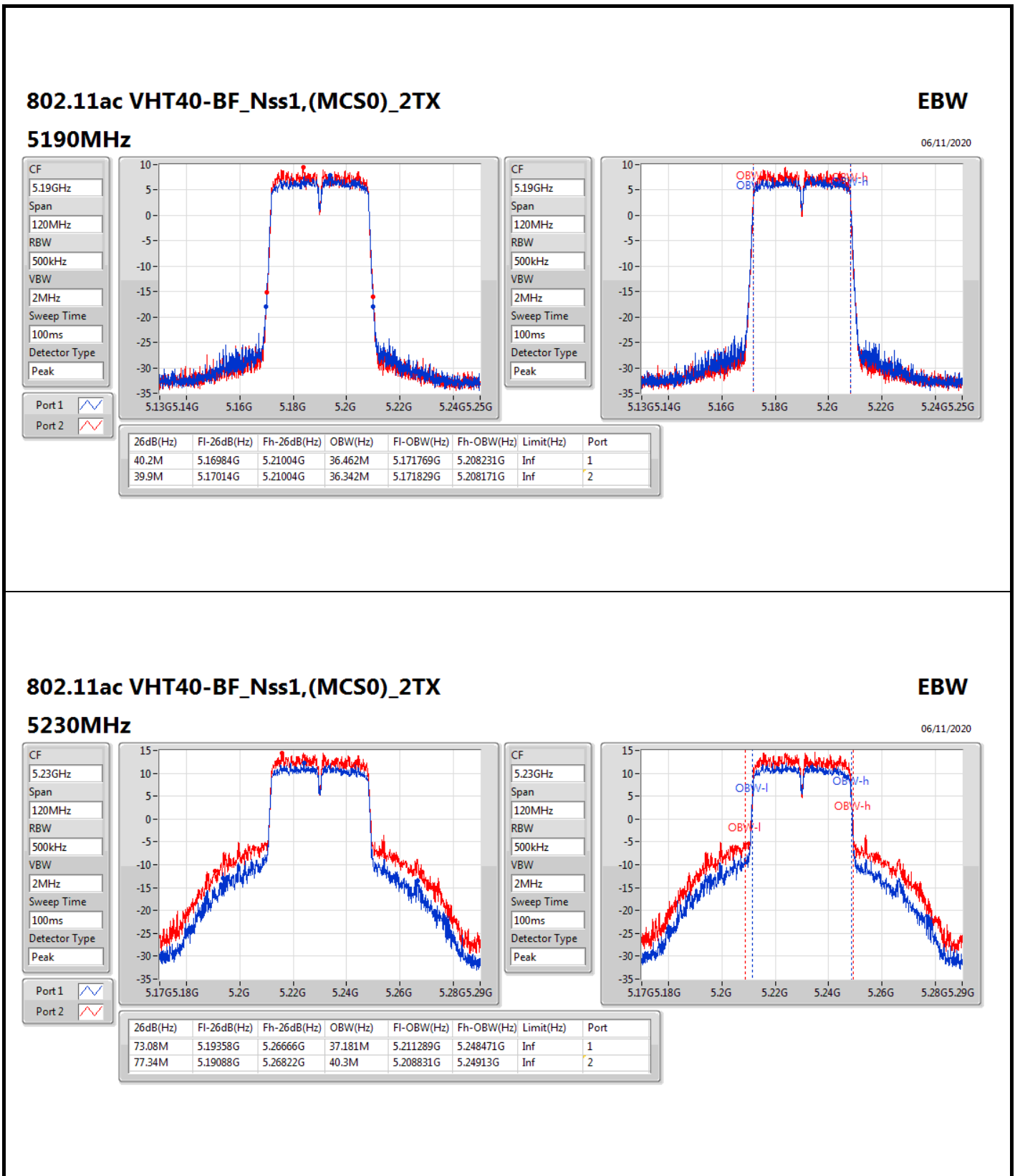
Test Mode: Mode 2



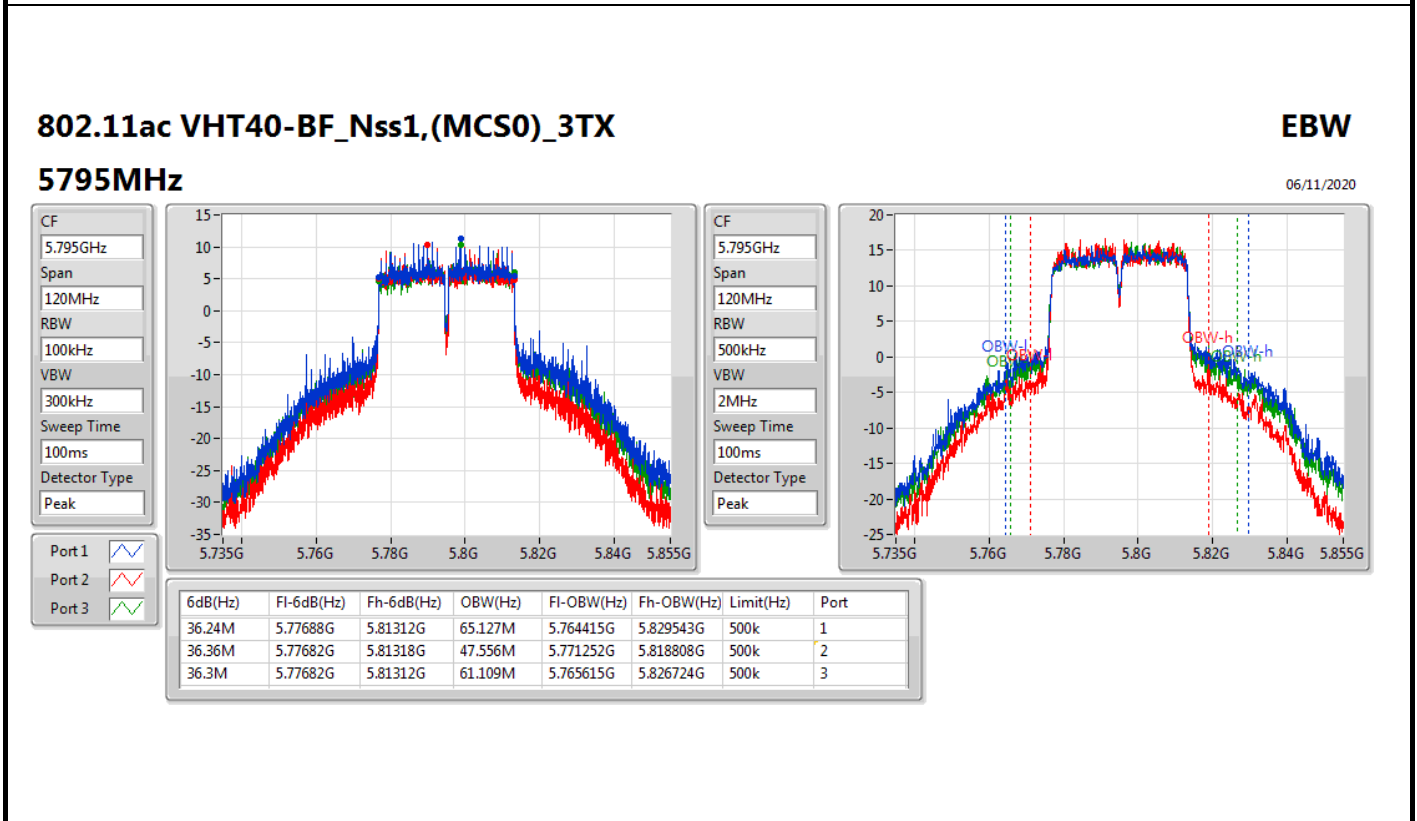
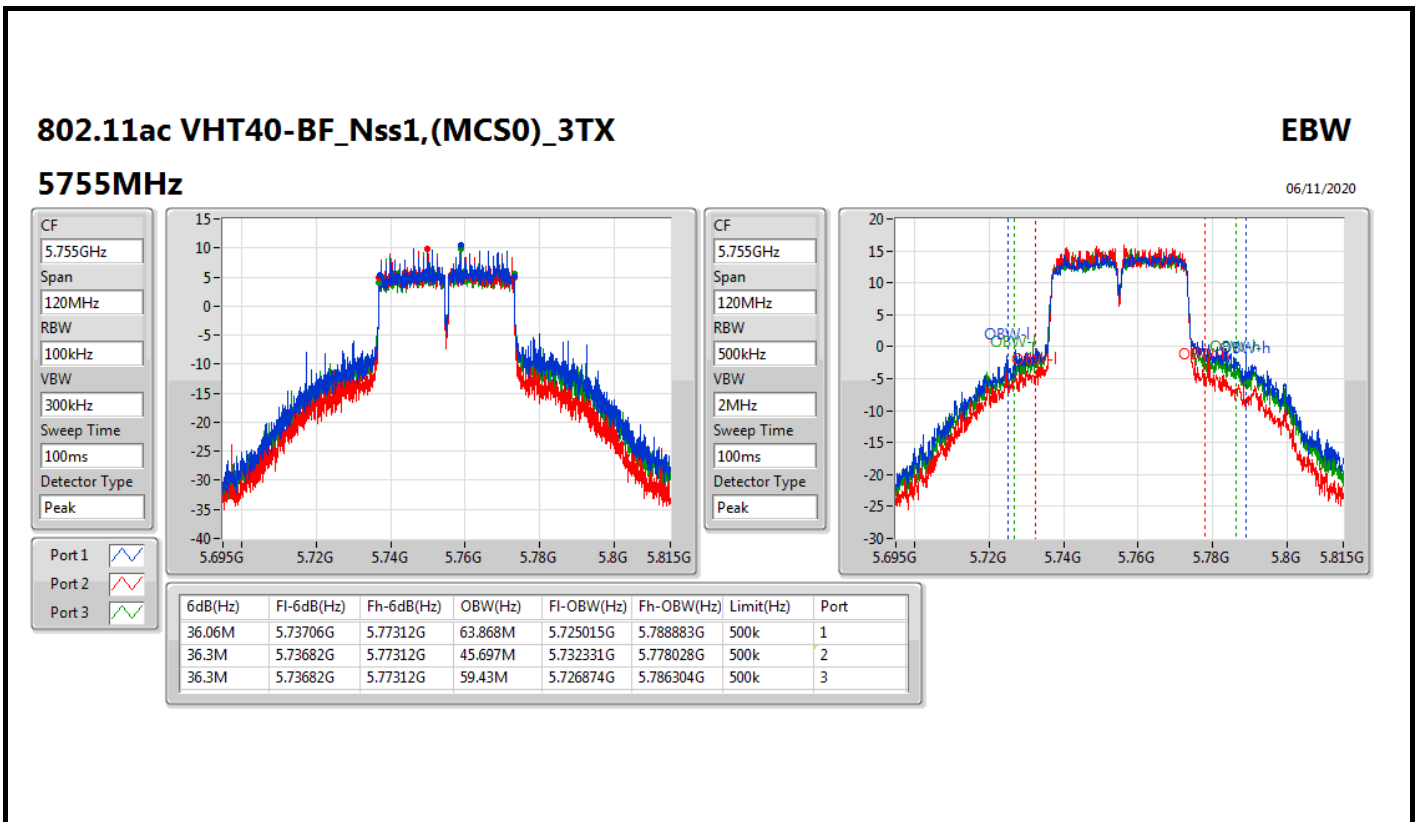
Test Mode: Mode 2



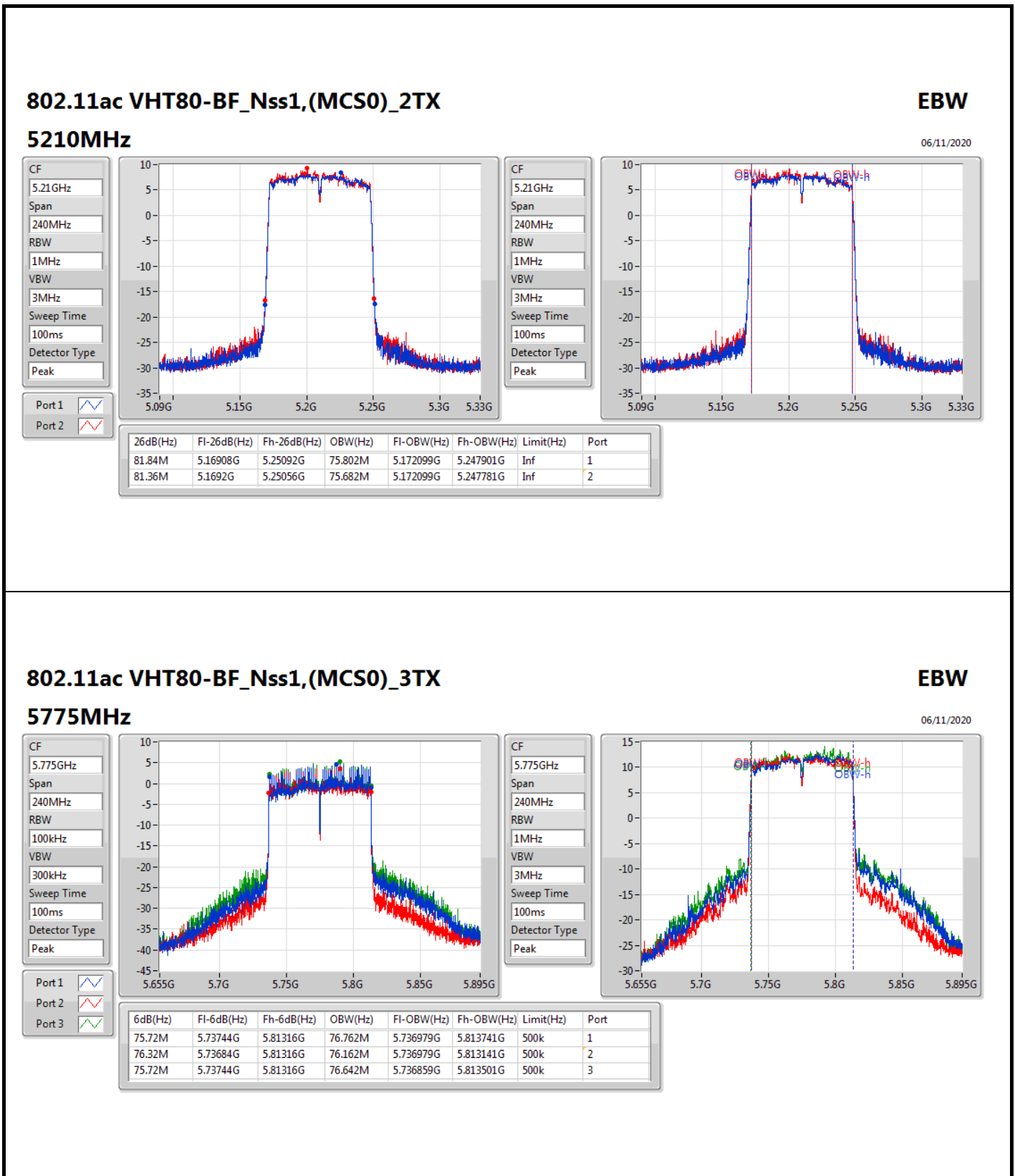
Test Mode: Mode 2



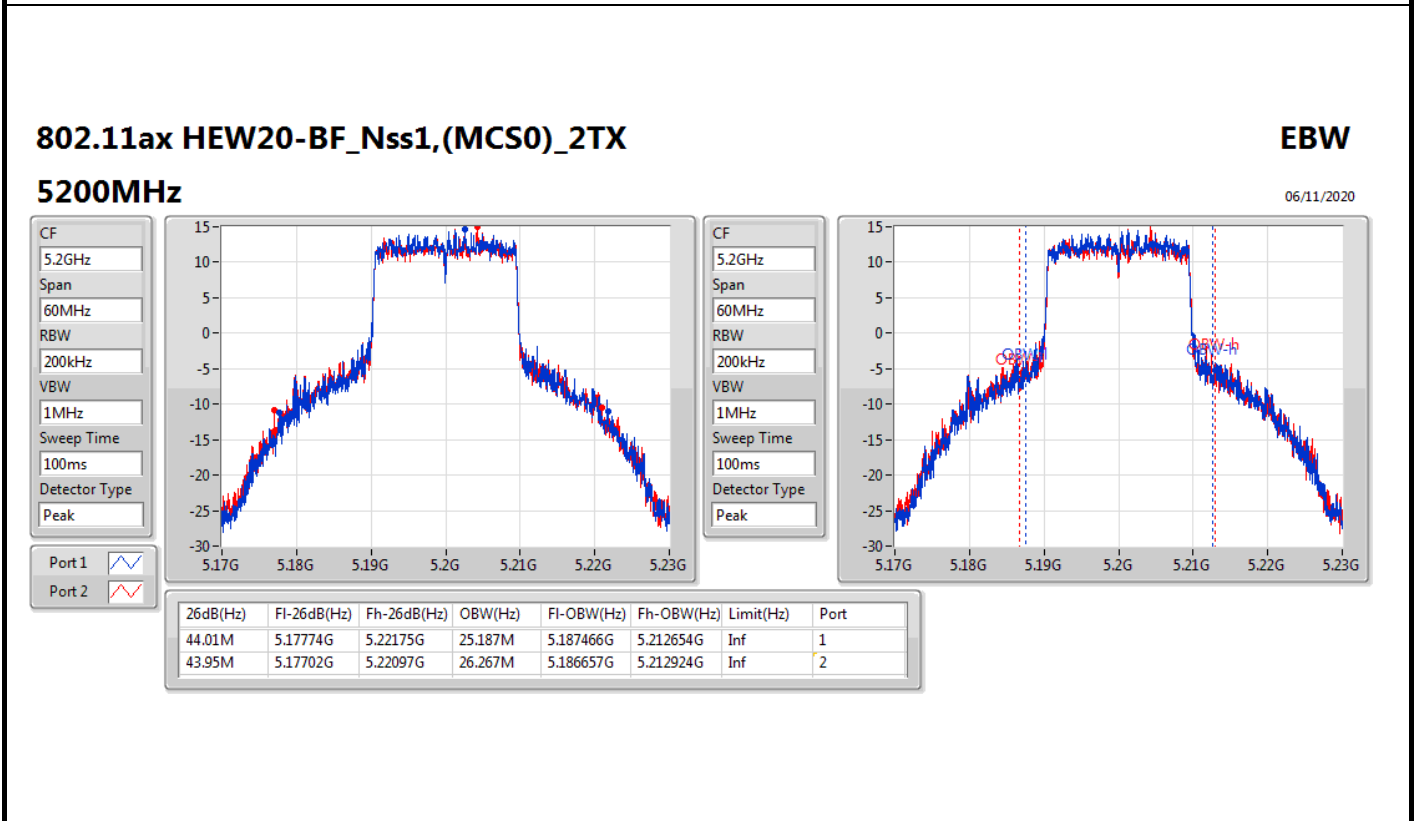
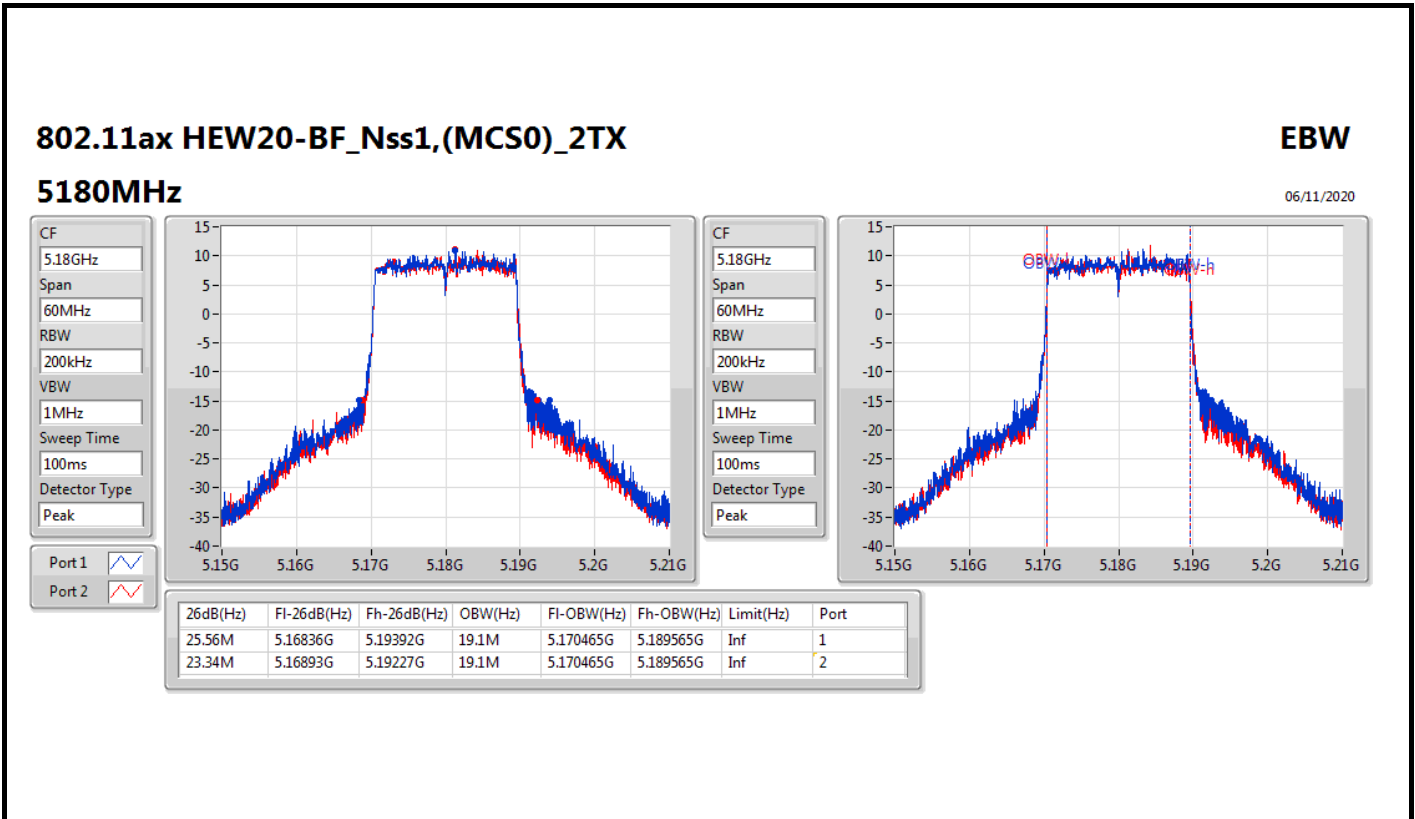
Test Mode: Mode 2



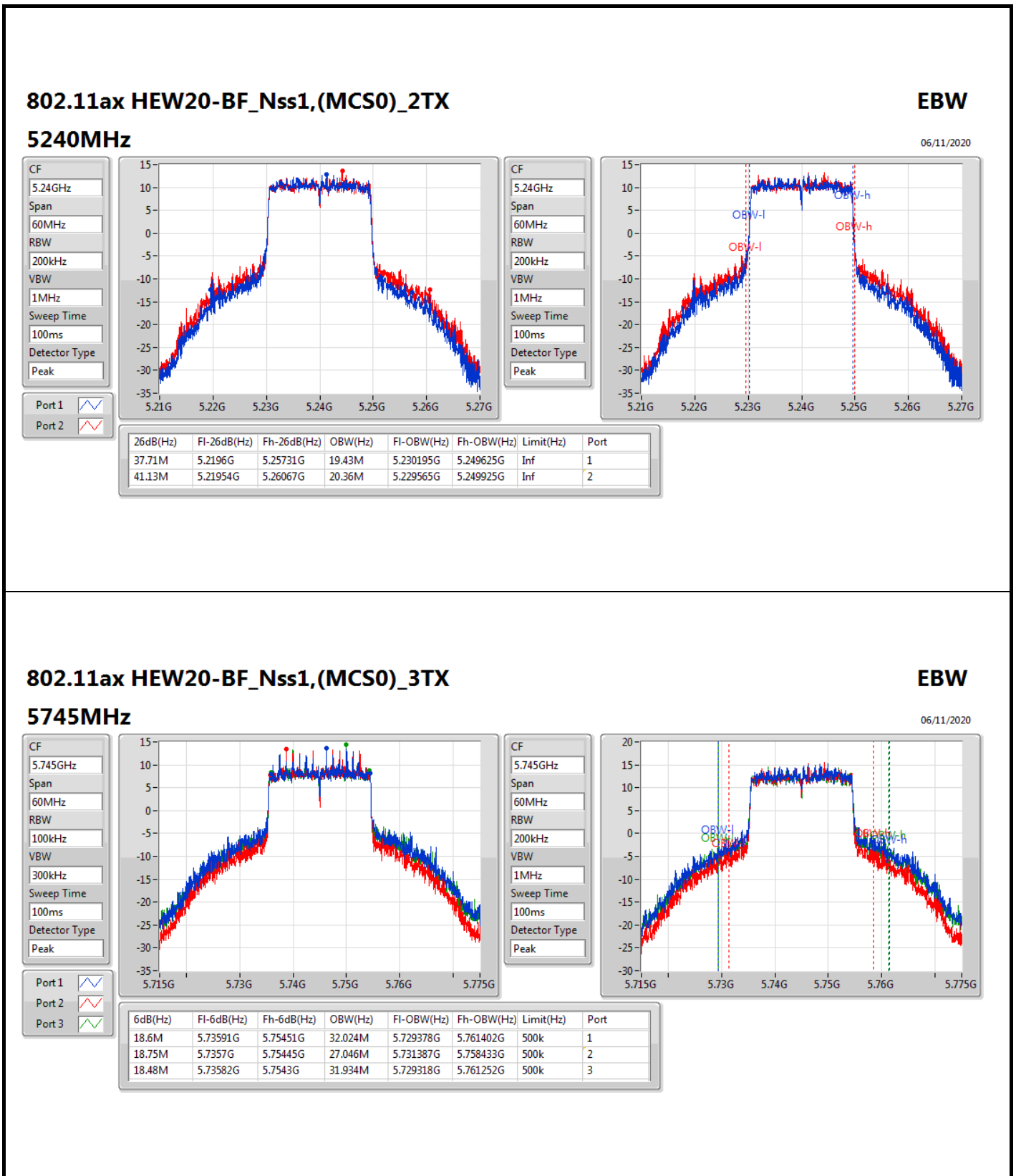
Test Mode: Mode 2



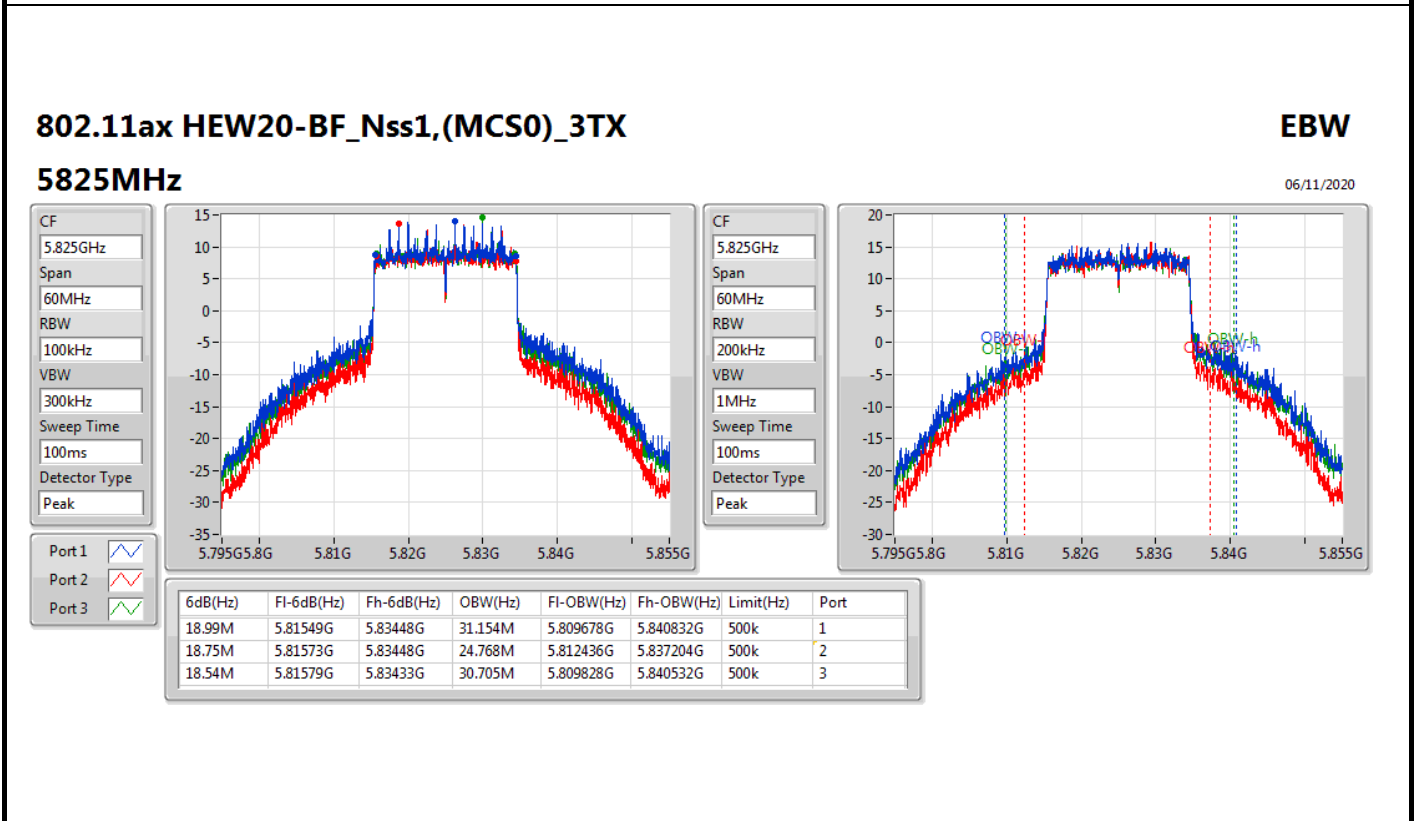
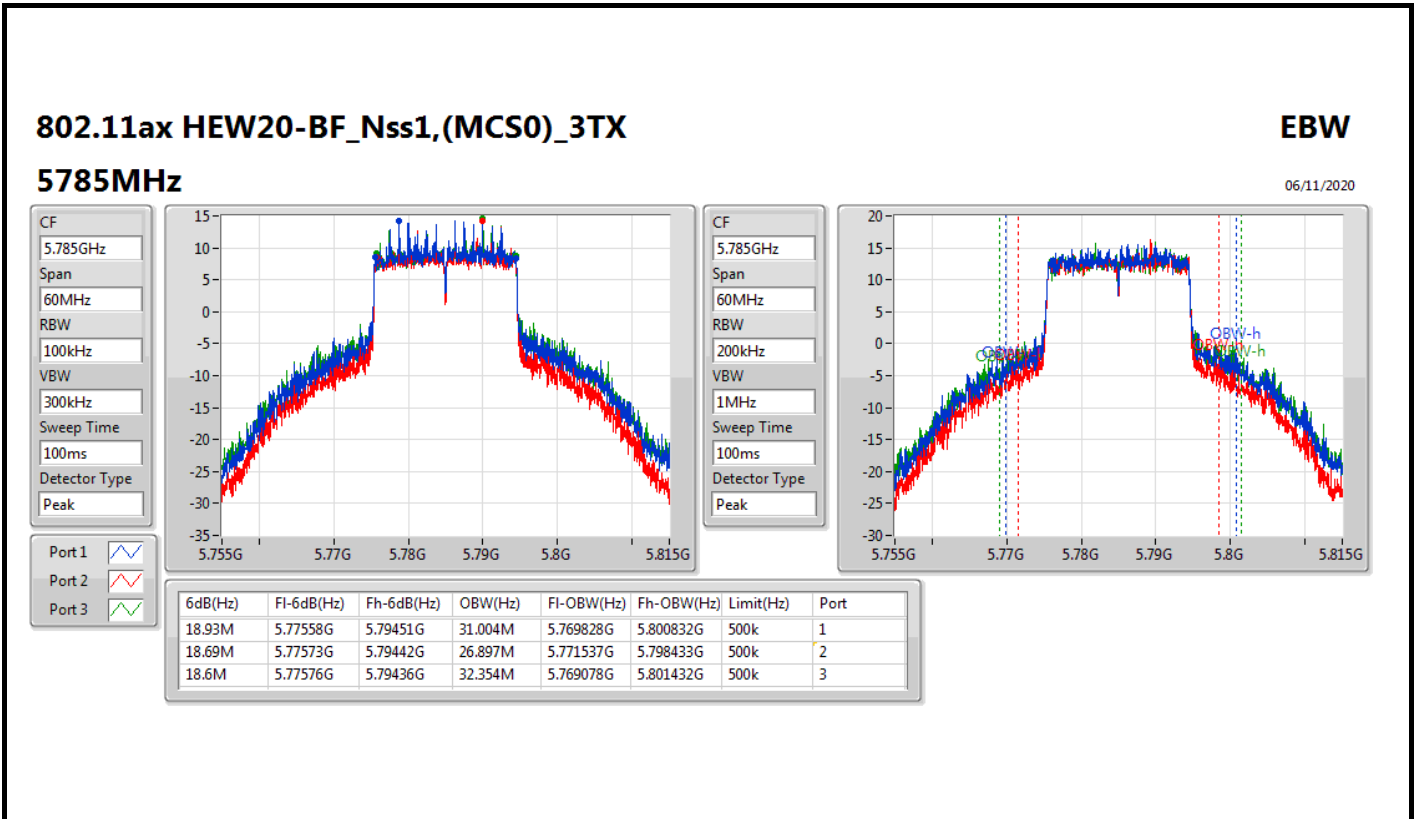
Test Mode: Mode 2



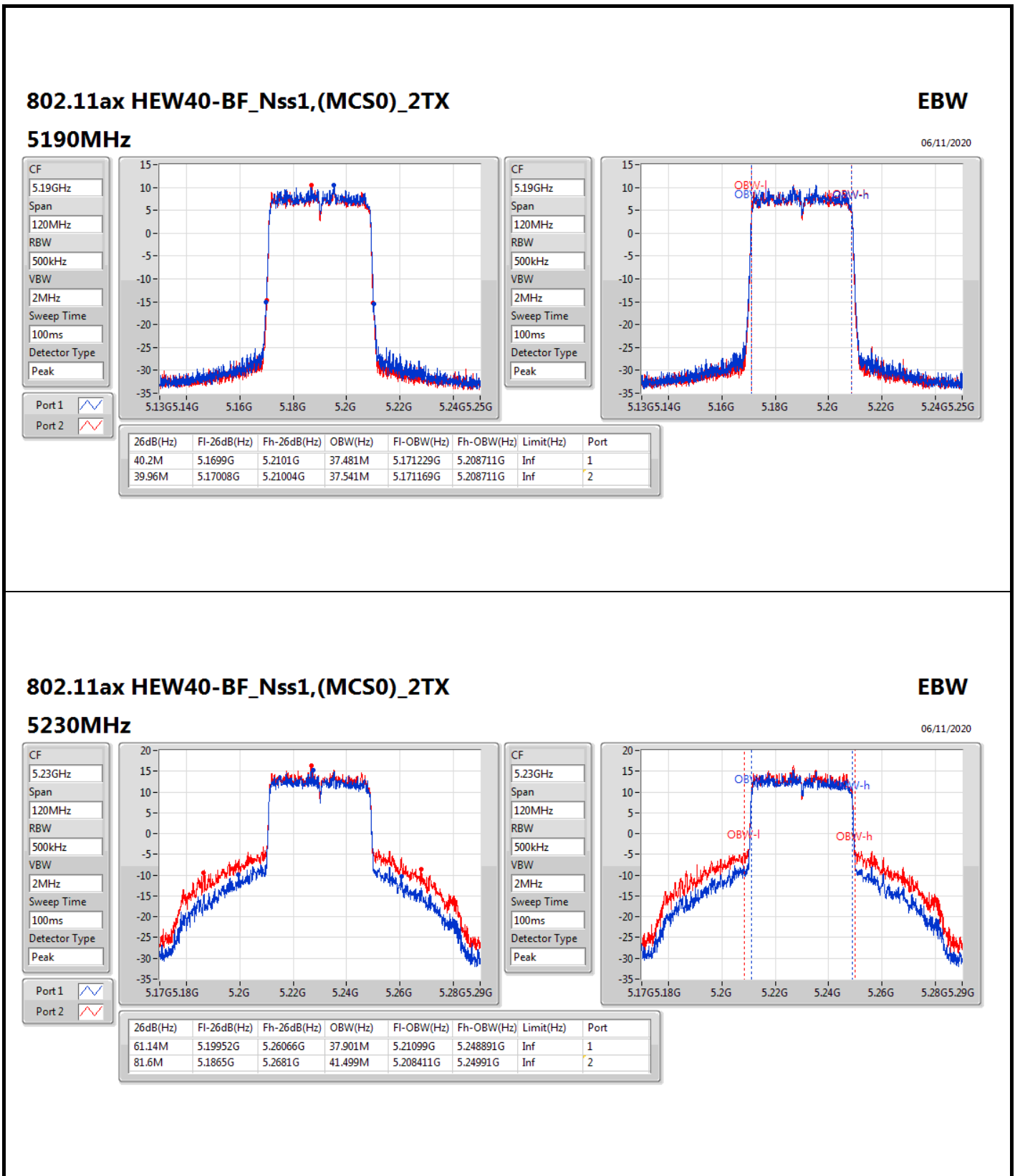
Test Mode: Mode 2



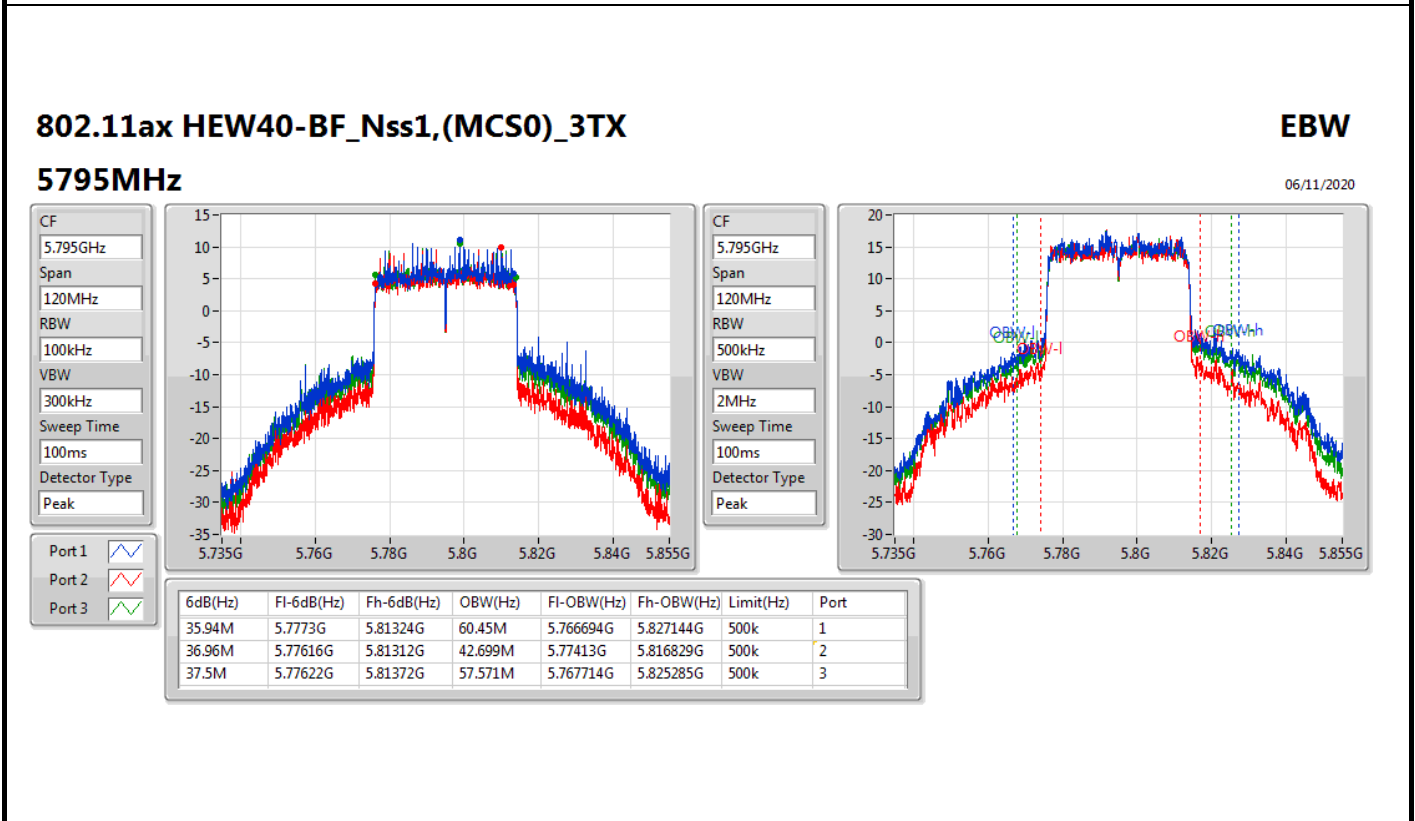
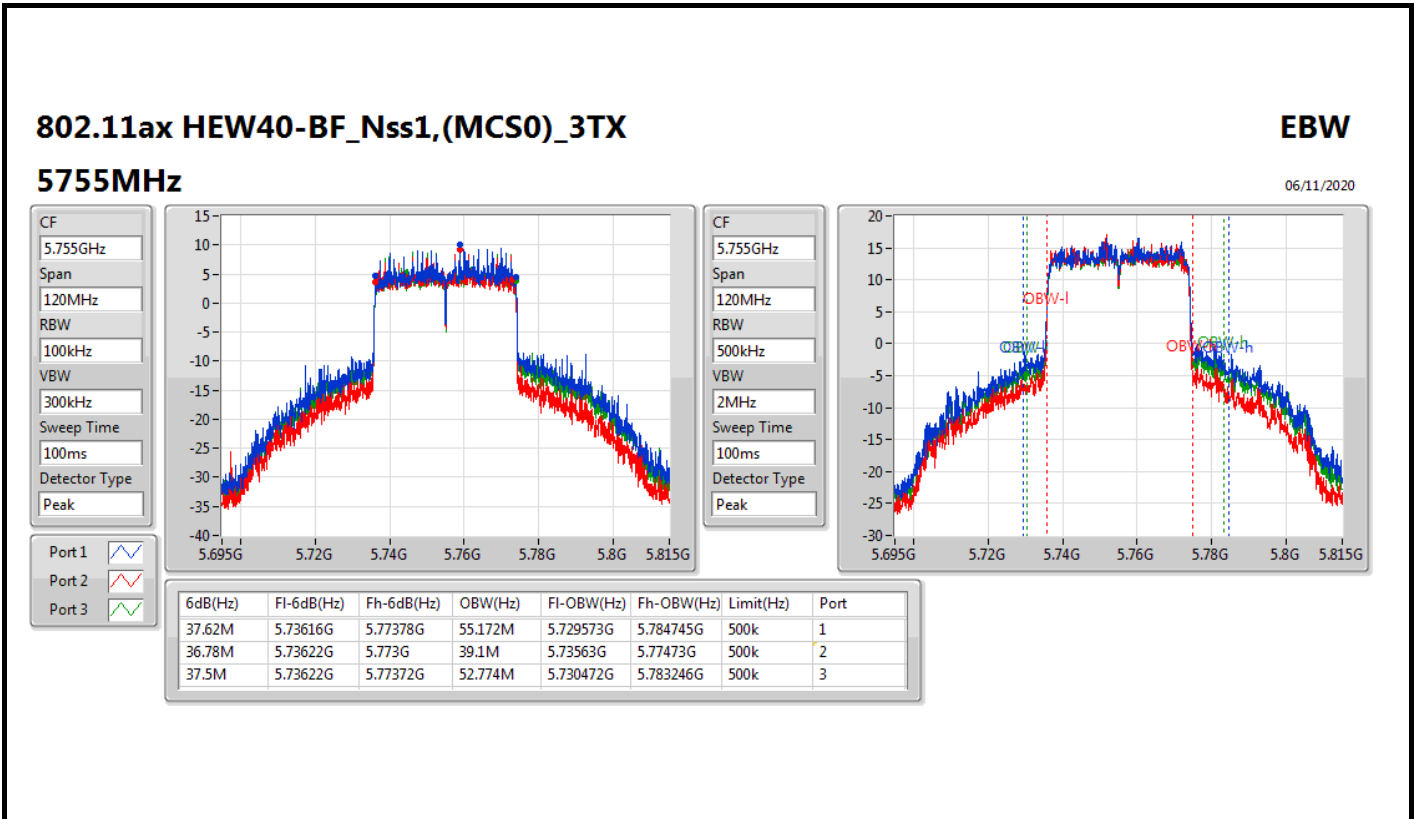
Test Mode: Mode 2



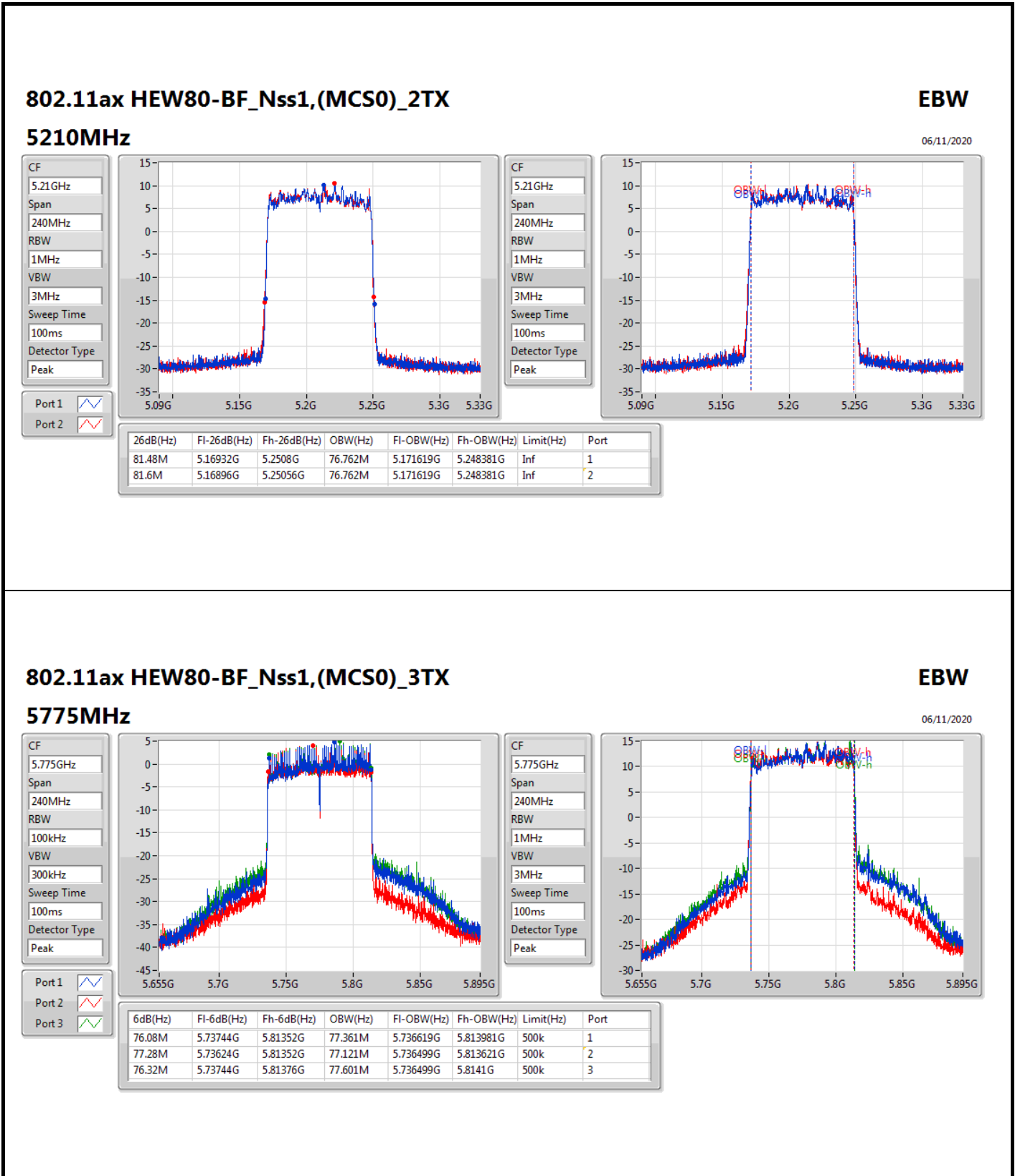
Test Mode: Mode 2



Test Mode: Mode 2



Test Mode: Mode 2





Test Mode: Mode 3

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11ac VHT20_Nss2,(MCS0)_2TX	29.49M	18.021M	18M0D1D	25.77M	17.901M
802.11ac VHT40_Nss2,(MCS0)_2TX	40.14M	36.402M	36M4D1D	39.96M	36.342M
802.11ac VHT80_Nss2,(MCS0)_2TX	81.48M	75.802M	75M8D1D	81.48M	75.802M
802.11ax HEW20_Nss2,(MCS0)_2TX	21.42M	19.1M	19M1D1D	21.39M	19.07M
802.11ax HEW40_Nss2,(MCS0)_2TX	40.08M	37.601M	37M6D1D	39.72M	37.601M
802.11ax HEW80_Nss2,(MCS0)_2TX	81.36M	77.121M	77M1D1D	81.24M	76.882M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;

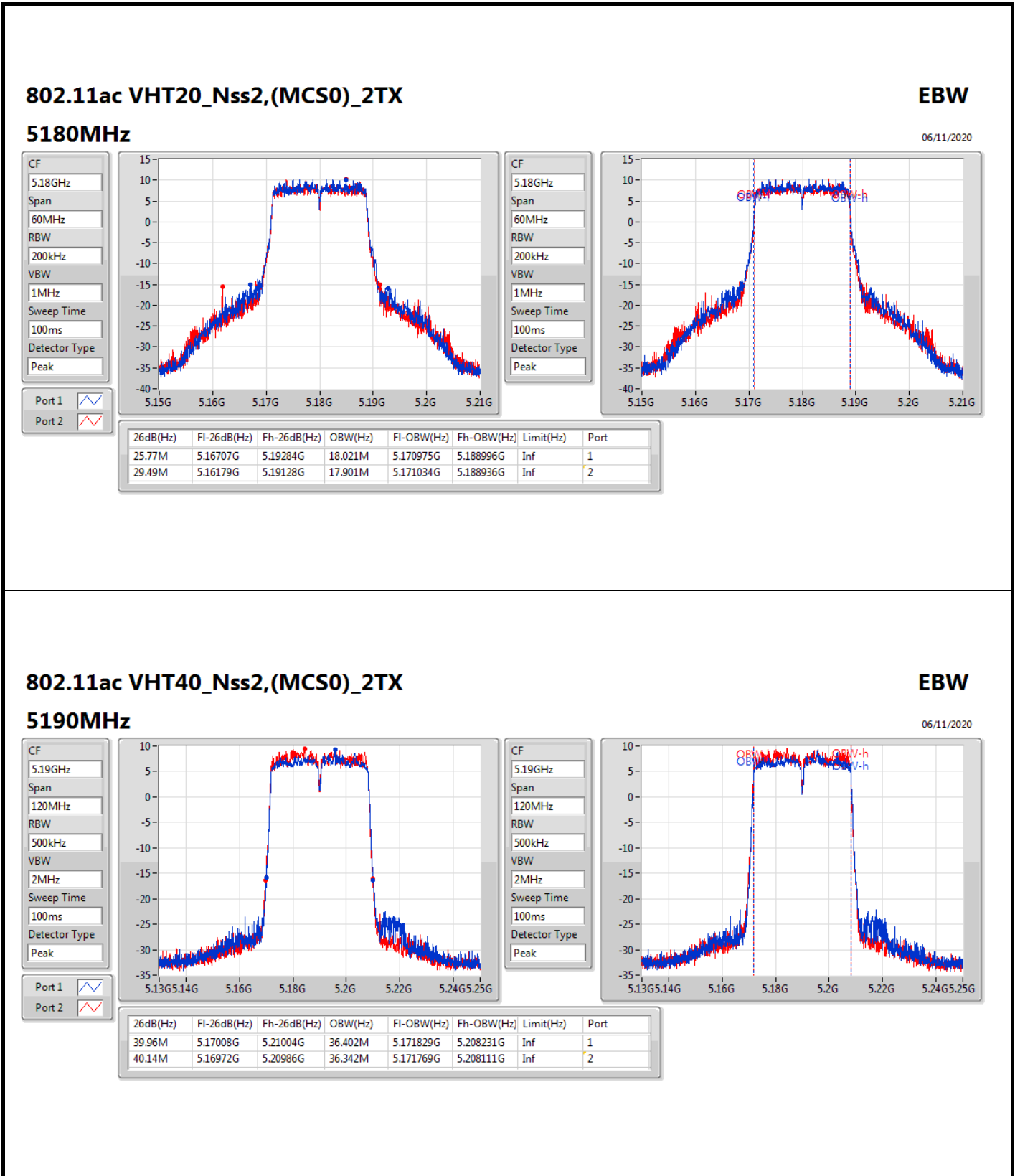
Test Mode: Mode 3
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	25.77M	18.021M	29.49M	17.901M
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.96M	36.402M	40.14M	36.342M
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.48M	75.802M	81.48M	75.802M
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.42M	19.07M	21.39M	19.1M
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.72M	37.601M	40.08M	37.601M
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	81.24M	76.882M	81.36M	77.121M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

Test Mode: Mode 3



802.11ac VHT40_Nss2,(MCS0)_2TX

5190MHz

06/11/2020

EBW

CF: 5.19GHz
Span: 120MHz
RBW: 500kHz
VBW: 2MHz
Sweep Time: 100ms
Detector Type: Peak

Port 1:

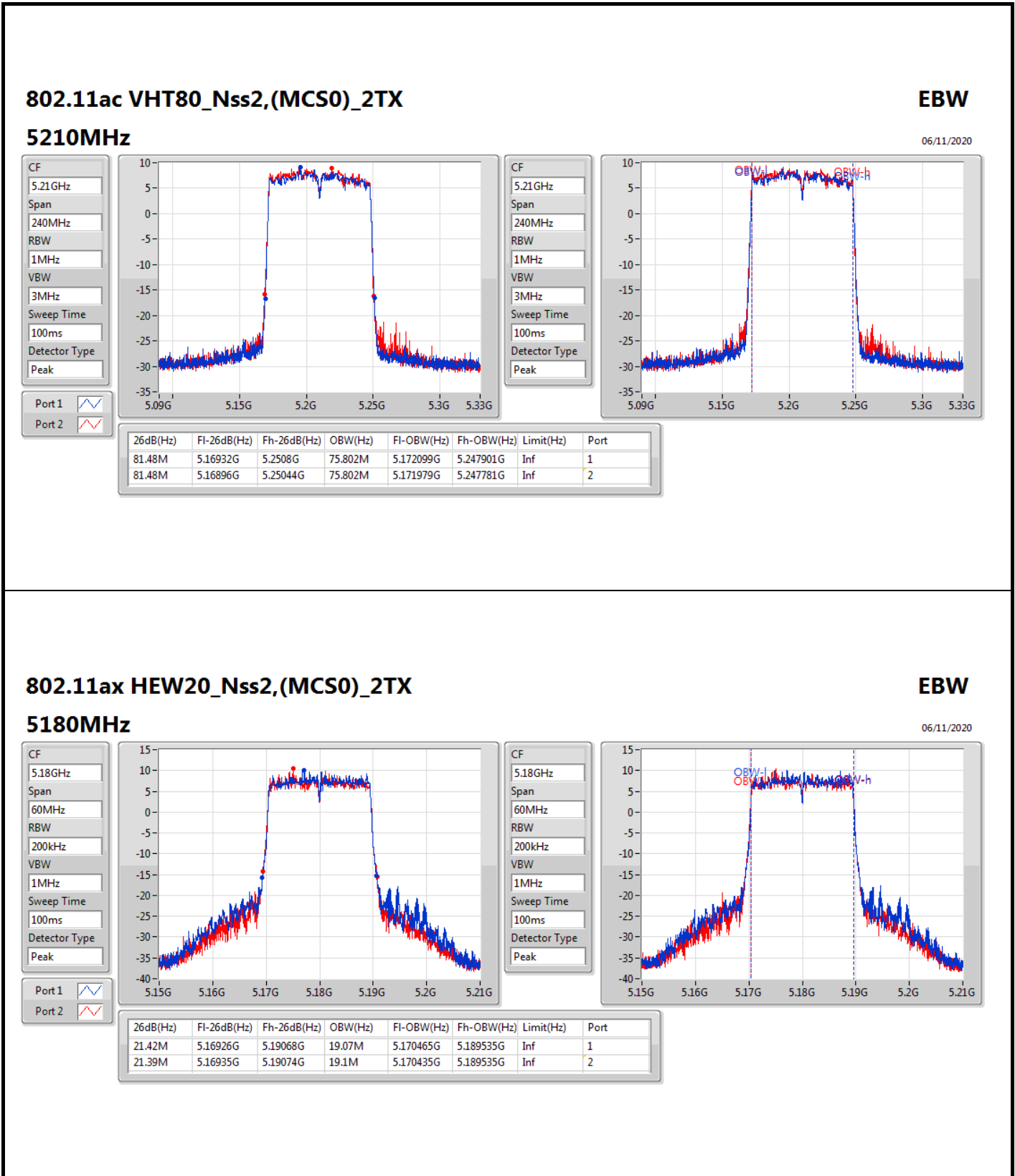
Port 2:

CF: 5.19GHz
Span: 120MHz
RBW: 500kHz
VBW: 2MHz
Sweep Time: 100ms
Detector Type: Peak

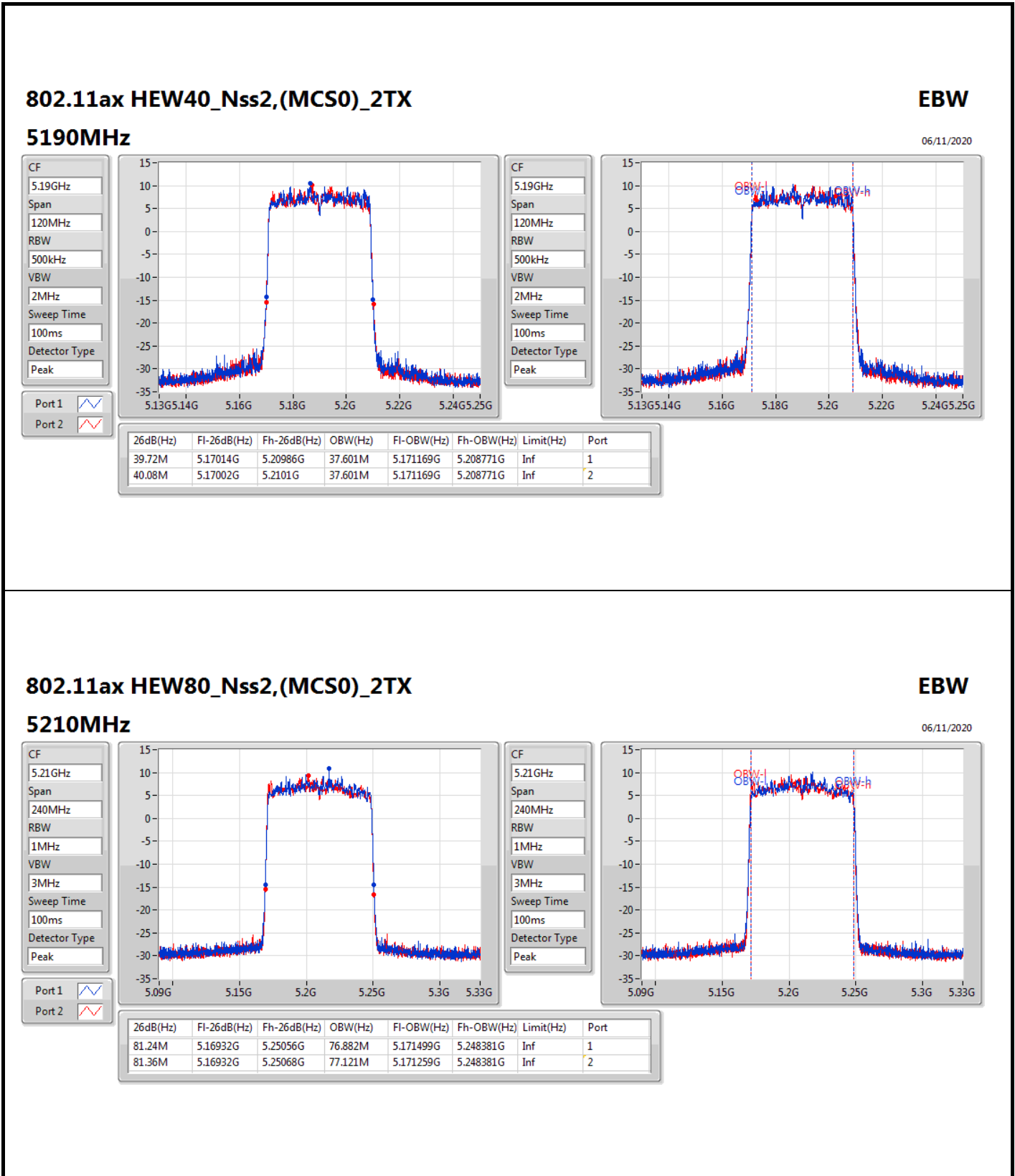
Port 1:

Port 2:

Test Mode: Mode 3



Test Mode: Mode 3





Test Mode: Mode 4
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80_Nss2,(MCS0)_3TX	75.96M	76.522M	76M5D1D	75.36M	76.162M
802.11ax HEW80_Nss2,(MCS0)_3TX	77.64M	77.961M	78MOD1D	75.48M	77.481M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;



Test Mode: Mode 4

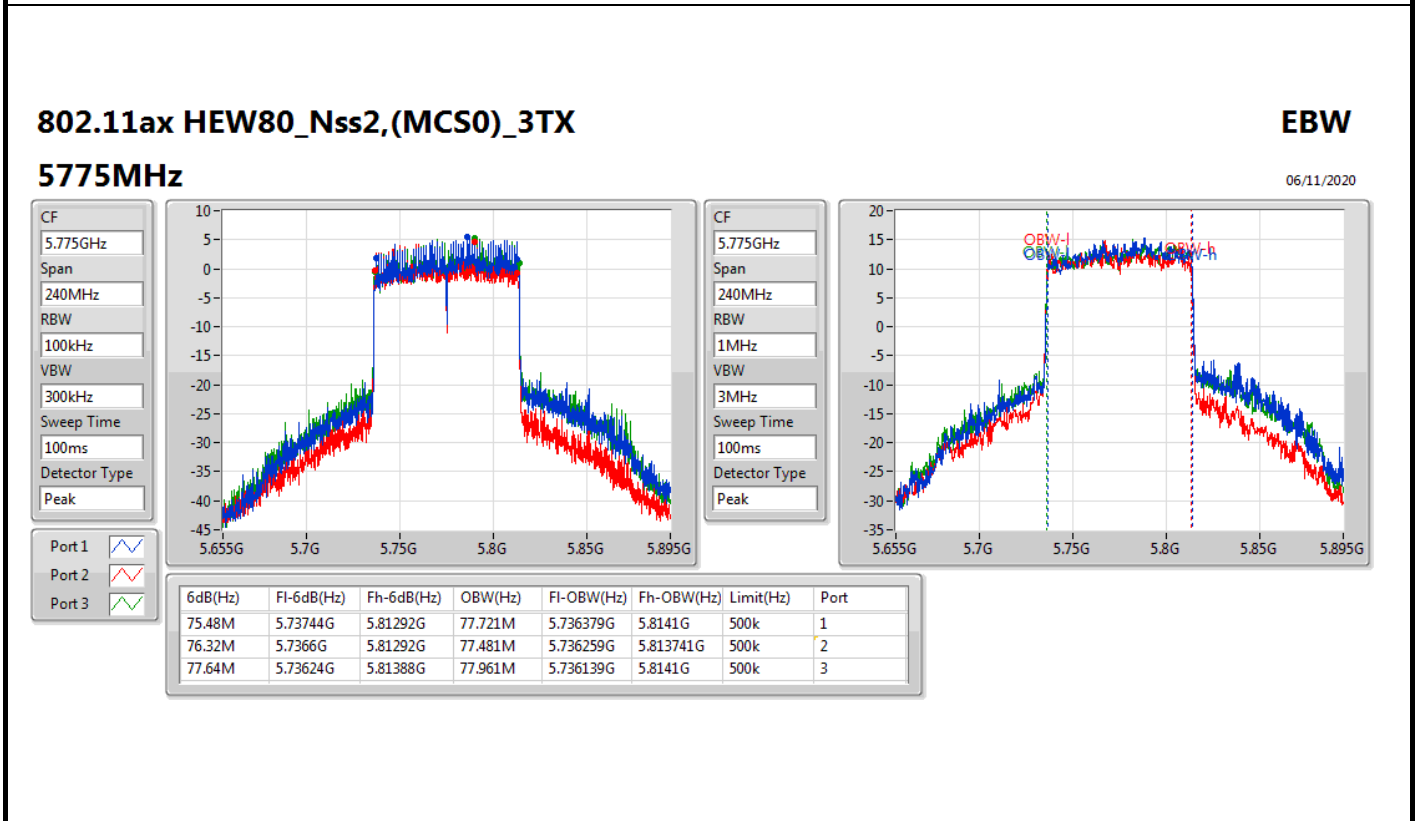
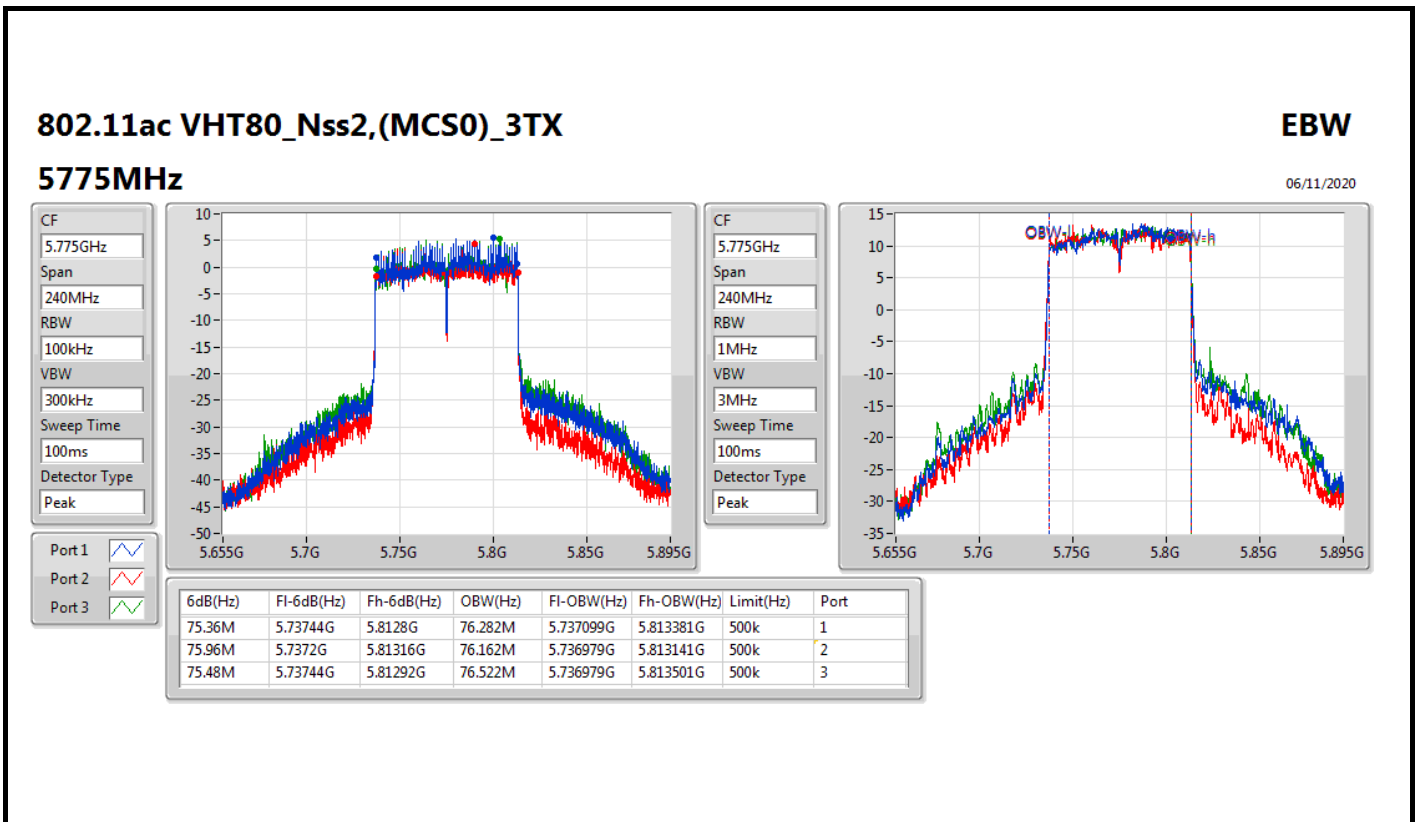
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11ac VHT80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.36M	76.282M	75.96M	76.162M	75.48M	76.522M
802.11ax HEW80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.48M	77.721M	76.32M	77.481M	77.64M	77.961M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

Test Mode: Mode 4





Test Mode: Mode 5

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80-BF_Nss2,(MCS0)_3TX	75.72M	76.882M	76M9D1D	75.36M	76.282M
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	76.32M	77.961M	78MOD1D	75.48M	77.481M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;



Test Mode: Mode 5

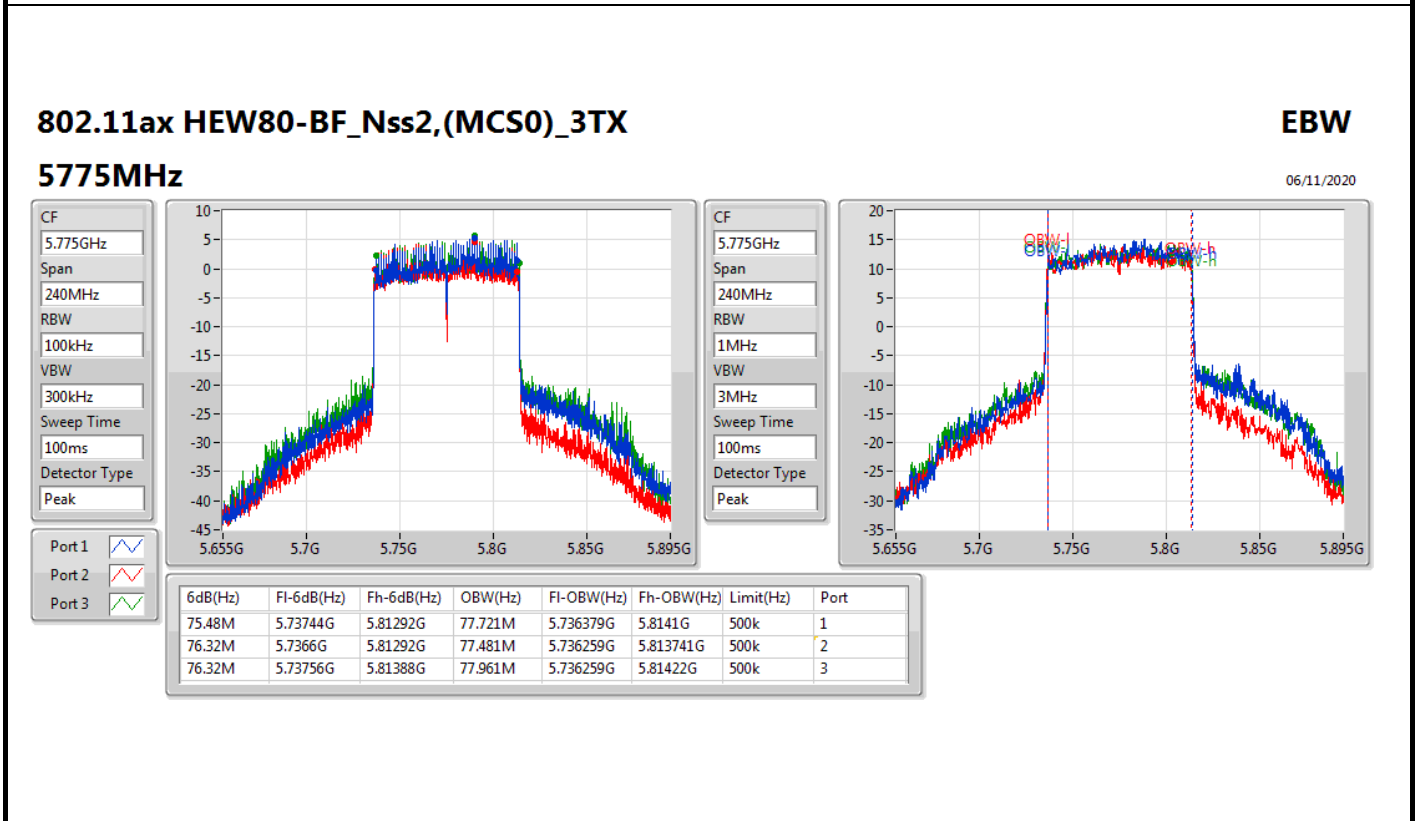
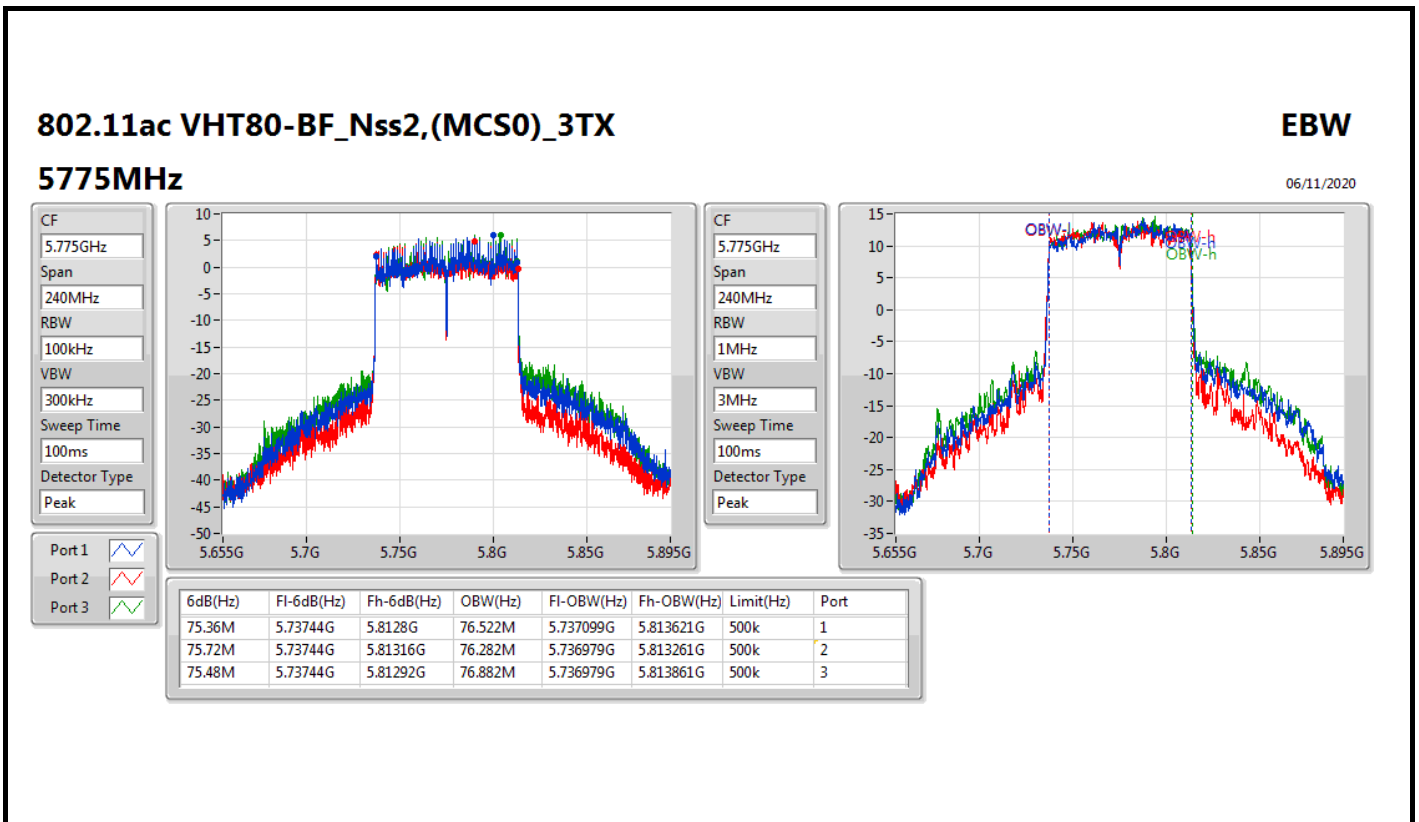
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11ac VHT80-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.36M	76.522M	75.72M	76.282M	75.48M	76.882M
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.48M	77.721M	76.32M	77.481M	76.32M	77.961M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

Test Mode: Mode 5





Test Mode: Mode 6

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.725-5.85GHz	-	-	-	-	-
802.11ac VHT80_Nss3,(MCS0)_3TX	75.96M	77.001M	77M0D1D	75.36M	76.162M
802.11ax HEW80_Nss3,(MCS0)_3TX	76.32M	78.201M	78M2D1D	75.48M	77.481M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Min-OBW = Minimum 99% occupied bandwidth;



Test Mode: Mode 6

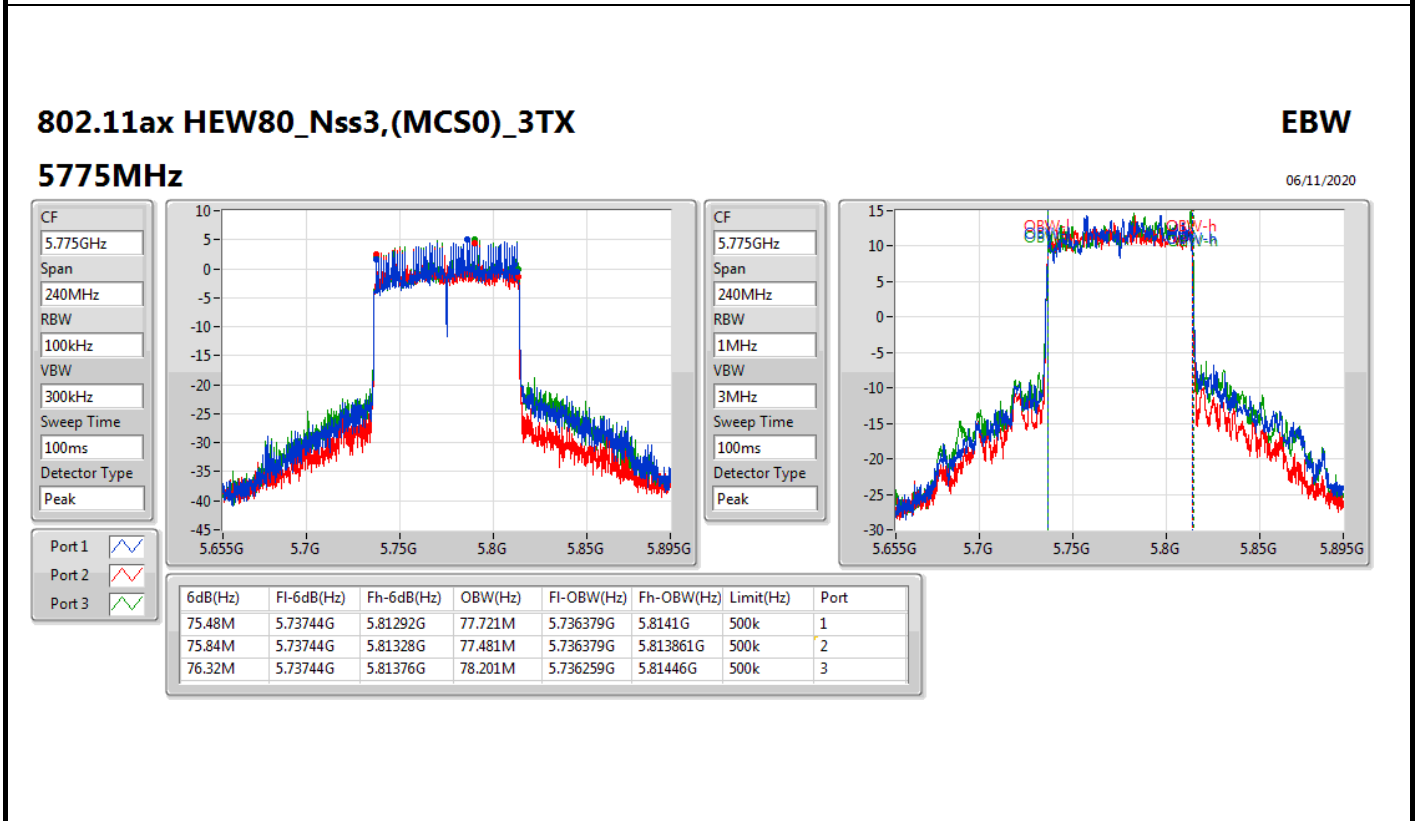
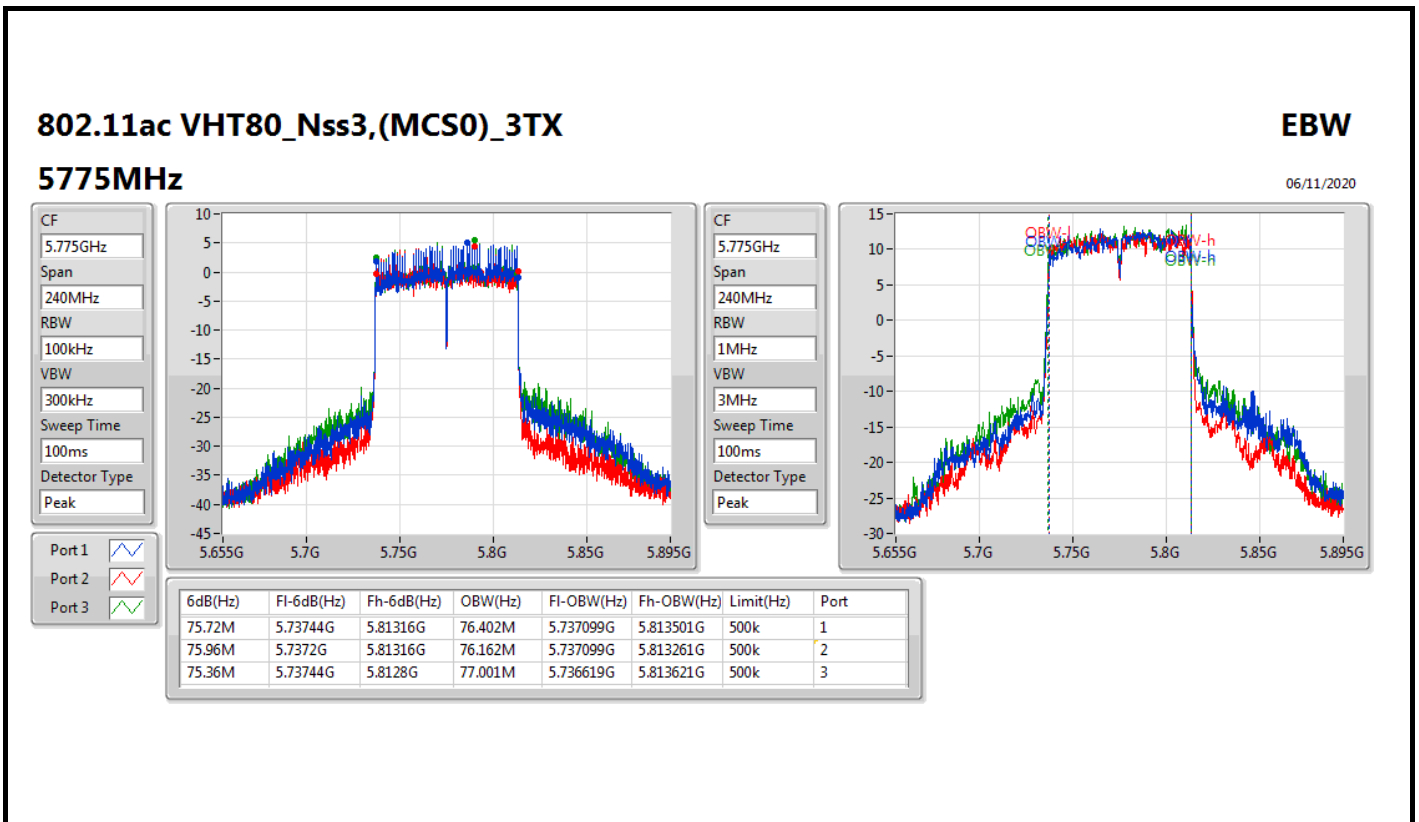
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11ac VHT80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.72M	76.402M	75.96M	76.162M	75.36M	77.001M
802.11ax HEW80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-	-
5775MHz	Pass	500k	75.48M	77.721M	75.84M	77.481M	76.32M	78.201M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;

Test Mode: Mode 6





**Test Mode: Mode 1
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	26.98	0.49888
802.11ac VHT20_Nss1,(MCS0)_2TX	26.74	0.47206
802.11ac VHT40_Nss1,(MCS0)_2TX	24.99	0.31550
802.11ac VHT80_Nss1,(MCS0)_2TX	20.12	0.10280
802.11ax HEW20_Nss1,(MCS0)_2TX	26.58	0.45499
802.11ax HEW40_Nss1,(MCS0)_2TX	25.43	0.34914
802.11ax HEW80_Nss1,(MCS0)_2TX	20.23	0.10544
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_3TX	28.46	0.70146
802.11ac VHT20_Nss1,(MCS0)_3TX	28.13	0.65013
802.11ac VHT40_Nss1,(MCS0)_3TX	29.23	0.83753
802.11ac VHT80_Nss1,(MCS0)_3TX	26.01	0.39902
802.11ax HEW20_Nss1,(MCS0)_3TX	28.94	0.78343
802.11ax HEW40_Nss1,(MCS0)_3TX	29.20	0.83176
802.11ax HEW80_Nss1,(MCS0)_3TX	26.18	0.41495



Test Mode: Mode 1
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	2.57	21.02	20.97	-	24.01	30.00
5200MHz	Pass	2.57	23.95	23.98	-	26.98	30.00
5240MHz	Pass	2.57	21.94	22.25	-	25.11	30.00
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	0.99	22.54	22.57	22.61	27.34	30.00
5785MHz	Pass	0.99	23.82	23.43	23.53	28.37	30.00
5825MHz	Pass	0.99	23.88	23.56	23.63	28.46	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	2.57	20.79	20.63	-	23.72	30.00
5200MHz	Pass	2.57	23.74	23.71	-	26.74	30.00
5240MHz	Pass	2.57	22.08	22.21	-	25.16	30.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	0.99	22.49	22.57	22.46	27.28	30.00
5785MHz	Pass	0.99	23.45	23.34	23.29	28.13	30.00
5825MHz	Pass	0.99	23.31	23.08	23.12	27.94	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	2.57	17.35	17.16	-	20.27	30.00
5230MHz	Pass	2.57	21.73	22.21	-	24.99	30.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	0.99	24.14	23.81	23.76	28.68	30.00
5795MHz	Pass	0.99	24.77	24.11	24.48	29.23	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	2.57	17.15	17.07	-	20.12	30.00
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	21.38	21.04	21.29	26.01	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	2.57	20.59	20.51	-	23.56	30.00
5200MHz	Pass	2.57	23.65	23.48	-	26.58	30.00
5240MHz	Pass	2.57	22.13	22.37	-	25.26	30.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	0.99	22.73	22.89	22.67	27.54	30.00
5785MHz	Pass	0.99	24.25	24.11	24.16	28.94	30.00
5825MHz	Pass	0.99	23.49	23.21	23.33	28.12	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	2.57	17.48	17.32	-	20.41	30.00
5230MHz	Pass	2.57	22.14	22.69	-	25.43	30.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	0.99	23.68	23.17	23.25	28.14	30.00
5795MHz	Pass	0.99	24.65	24.28	24.34	29.20	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	2.57	17.25	17.19	-	20.23	30.00
802.11ax HEW80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-



Test Mode: Mode 1

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
5775MHz	Pass	0.99	21.53	21.13	21.56	26.18	30.00

DG = Directional Gain; **Port X** = Port X output power



Test Mode: Mode 2
Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	27.23	0.52845
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	25.20	0.33113
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	20.36	0.10864
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.90	0.48978
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	25.43	0.34914
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.95	0.09886
5.725-5.85GHz	-	-
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	28.13	0.65013
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	29.34	0.85901
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	26.24	0.42073
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	29.67	0.92683
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	29.42	0.87498
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	26.41	0.43752



Test Mode: Mode 2
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	21.53	21.47	-	24.51	30.00
5200MHz	Pass	5.58	24.17	24.27	-	27.23	30.00
5240MHz	Pass	5.58	22.08	22.21	-	25.16	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	22.49	22.57	22.46	27.28	30.00
5785MHz	Pass	5.76	23.45	23.34	23.29	28.13	30.00
5825MHz	Pass	5.76	22.96	22.69	22.58	27.52	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	17.56	17.39	-	20.49	30.00
5230MHz	Pass	5.58	21.93	22.43	-	25.20	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	24.14	23.81	23.76	28.68	30.00
5795MHz	Pass	5.76	24.87	24.29	24.54	29.34	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	17.38	17.31	-	20.36	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	5.76	21.63	21.27	21.51	26.24	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	20.59	20.51	-	23.56	30.00
5200MHz	Pass	5.58	23.98	23.79	-	26.90	30.00
5240MHz	Pass	5.58	22.13	22.37	-	25.26	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	24.36	24.48	24.25	29.14	30.00
5785MHz	Pass	5.76	24.96	24.83	24.91	29.67	30.00
5825MHz	Pass	5.76	24.94	24.72	24.65	29.54	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	17.48	17.32	-	20.41	30.00
5230MHz	Pass	5.58	22.14	22.69	-	25.43	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	23.97	23.43	23.48	28.40	30.00
5795MHz	Pass	5.76	24.88	24.49	24.56	29.42	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	16.96	16.91	-	19.95	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	5.76	21.75	21.37	21.79	26.41	30.00

DG = Directional Gain; Port X = Port X output power



**Test Mode: Mode 3
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11ac VHT20_Nss2,(MCS0)_2TX	23.65	0.23174
802.11ac VHT40_Nss2,(MCS0)_2TX	21.12	0.12942
802.11ac VHT80_Nss2,(MCS0)_2TX	20.32	0.10765
802.11ax HEW20_Nss2,(MCS0)_2TX	22.32	0.17061
802.11ax HEW40_Nss2,(MCS0)_2TX	20.24	0.10568
802.11ax HEW80_Nss2,(MCS0)_2TX	19.76	0.09462



Test Mode: Mode 3
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.57	20.75	20.52	23.65	30.00
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.57	18.23	17.98	21.12	30.00
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.57	17.38	17.23	20.32	30.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.57	19.40	19.21	22.32	30.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.57	17.31	17.14	20.24	30.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.57	16.82	16.67	19.76	30.00

DG = Directional Gain; Port X = Port X output power



**Test Mode: Mode 4
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11ac VHT80_Nss2,(MCS0)_3TX	26.04	0.40179
802.11ax HEW80_Nss2,(MCS0)_3TX	26.62	0.45920



Test Mode: Mode 4
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	21.38	21.06	21.35	26.04	30.00
802.11ax HEW80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	21.96	21.63	21.94	26.62	30.00

DG = Directional Gain; Port X = Port X output power



**Test Mode: Mode 5
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11ac VHT80-BF_Nss2,(MCS0)_3TX	26.51	0.44771
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	26.62	0.45920



Test Mode: Mode 5
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT80-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	2.75	21.87	21.52	21.82	26.51	30.00
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	2.75	21.96	21.63	21.94	26.62	30.00

DG = Directional Gain; Port X = Port X output power



**Test Mode: Mode 6
Summary**

Mode	Total Power (dBm)	Total Power (W)
5.725-5.85GHz	-	-
802.11ac VHT80_Nss3,(MCS0)_3TX	26.15	0.41210
802.11ax HEW80_Nss3,(MCS0)_3TX	26.33	0.42954



Test Mode: Mode 6
Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ac VHT80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	21.43	21.13	21.56	26.15	30.00
802.11ax HEW80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	21.65	21.34	21.68	26.33	30.00

DG = Directional Gain; Port X = Port X output power

**Test Mode: Mode 1
Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	13.95
802.11ac VHT20_Nss1,(MCS0)_2TX	13.40
802.11ac VHT40_Nss1,(MCS0)_2TX	8.87
802.11ac VHT80_Nss1,(MCS0)_2TX	1.06
802.11ax HEW20_Nss1,(MCS0)_2TX	12.96
802.11ax HEW40_Nss1,(MCS0)_2TX	9.14
802.11ax HEW80_Nss1,(MCS0)_2TX	1.36
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_3TX	13.86
802.11ac VHT20_Nss1,(MCS0)_3TX	13.22
802.11ac VHT40_Nss1,(MCS0)_3TX	11.51
802.11ac VHT80_Nss1,(MCS0)_3TX	5.85
802.11ax HEW20_Nss1,(MCS0)_3TX	13.80
802.11ax HEW40_Nss1,(MCS0)_3TX	11.25
802.11ax HEW80_Nss1,(MCS0)_3TX	5.85

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



**Test Mode: Mode 1
Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	7.88	7.87	-	10.78	17.00
5200MHz	Pass	5.58	11.02	10.96	-	13.95	17.00
5240MHz	Pass	5.58	9.12	9.38	-	12.15	17.00
802.11a_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	8.23	7.99	8.05	12.75	30.00
5785MHz	Pass	5.76	9.37	8.95	9.07	13.76	30.00
5825MHz	Pass	5.76	9.33	9.08	9.20	13.86	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	7.43	7.24	-	10.31	17.00
5200MHz	Pass	5.58	10.54	10.38	-	13.40	17.00
5240MHz	Pass	5.58	8.77	8.98	-	11.86	17.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	7.88	7.94	7.79	12.50	30.00
5785MHz	Pass	5.76	8.66	8.52	8.47	13.22	30.00
5825MHz	Pass	5.76	8.52	8.19	8.50	13.08	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	1.15	0.88	-	3.96	17.00
5230MHz	Pass	5.58	5.61	6.24	-	8.87	17.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	6.56	6.04	6.11	10.95	30.00
5795MHz	Pass	5.76	7.01	6.47	6.79	11.51	30.00
802.11ac VHT80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	-1.95	-1.91	-	1.06	17.00
802.11ac VHT80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	5.76	1.19	0.80	1.34	5.85	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	6.99	6.84	-	9.92	17.00
5200MHz	Pass	5.58	10.09	9.91	-	12.96	17.00
5240MHz	Pass	5.58	8.76	8.88	-	11.78	17.00
802.11ax HEW20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	7.79	7.79	7.70	12.42	30.00
5785MHz	Pass	5.76	9.25	9.06	9.06	13.80	30.00
5825MHz	Pass	5.76	8.32	8.20	8.20	12.96	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	1.25	0.93	-	4.03	17.00
5230MHz	Pass	5.58	5.85	6.47	-	9.14	17.00
802.11ax HEW40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	5.98	5.46	5.50	10.31	30.00
5795MHz	Pass	5.76	6.83	6.36	6.49	11.25	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	-1.68	-1.61	-	1.36	17.00
802.11ax HEW80_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-



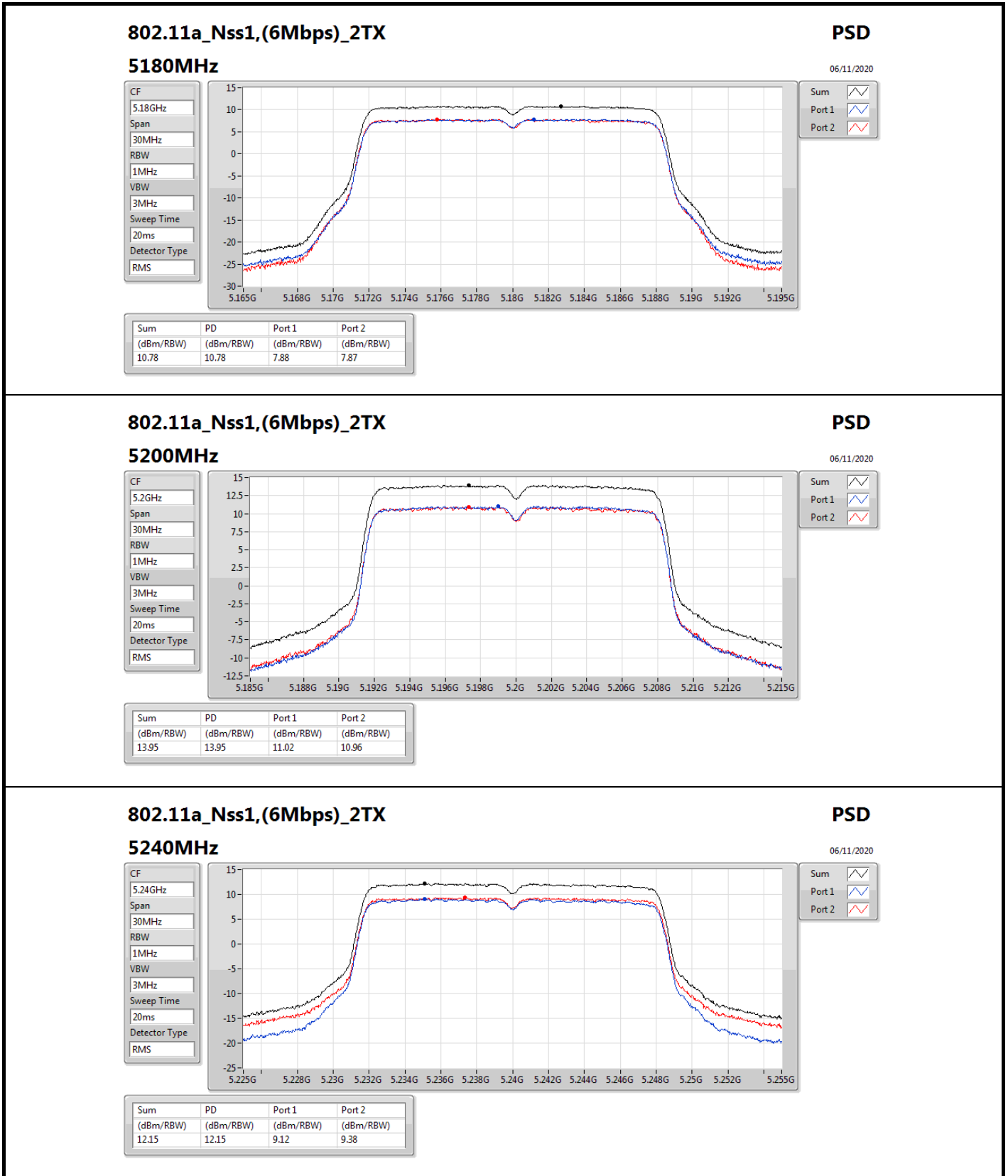
Test Mode: Mode 1

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
5775MHz	Pass	5.76	1.48	0.69	1.29	5.85	30.00

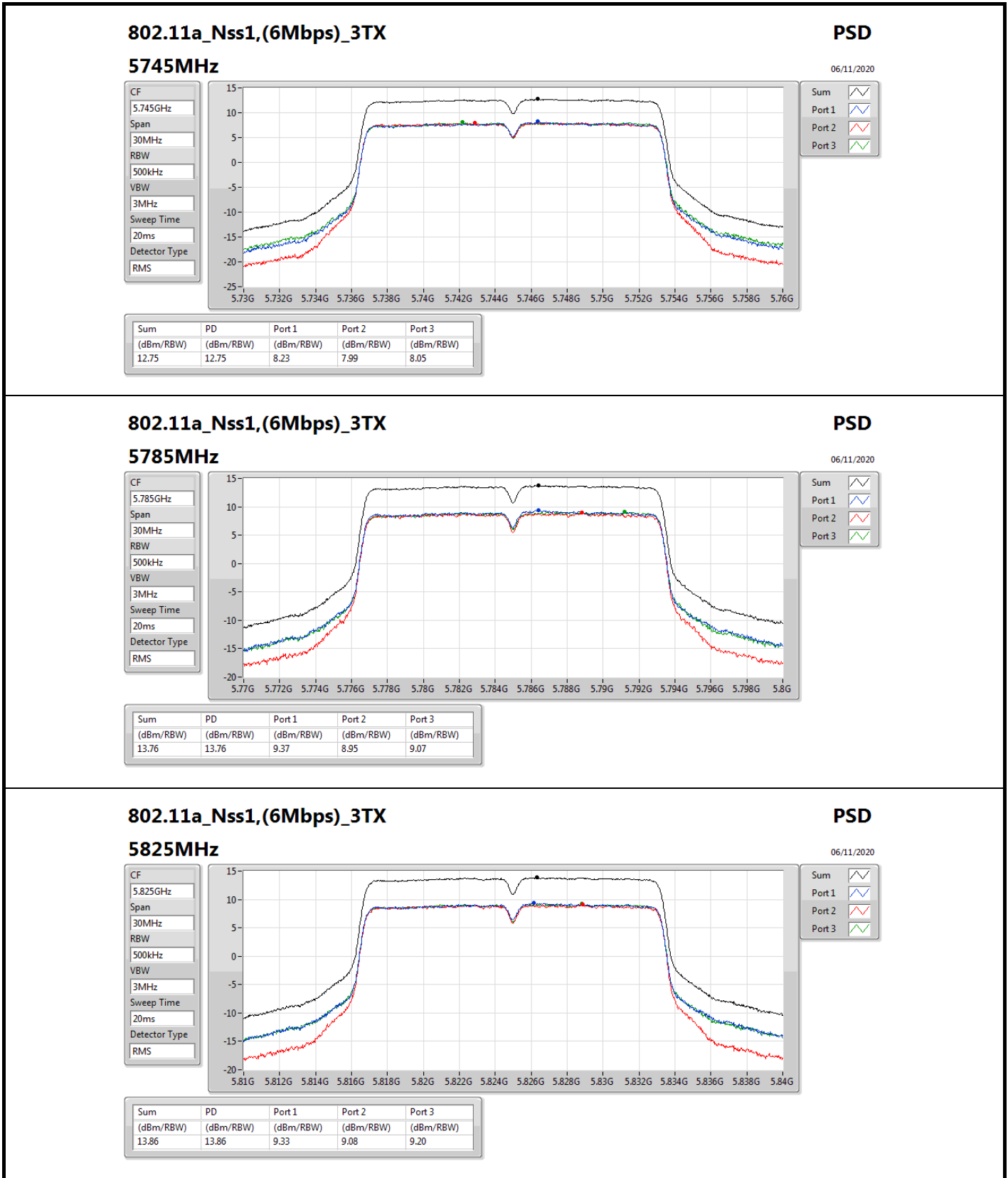
DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

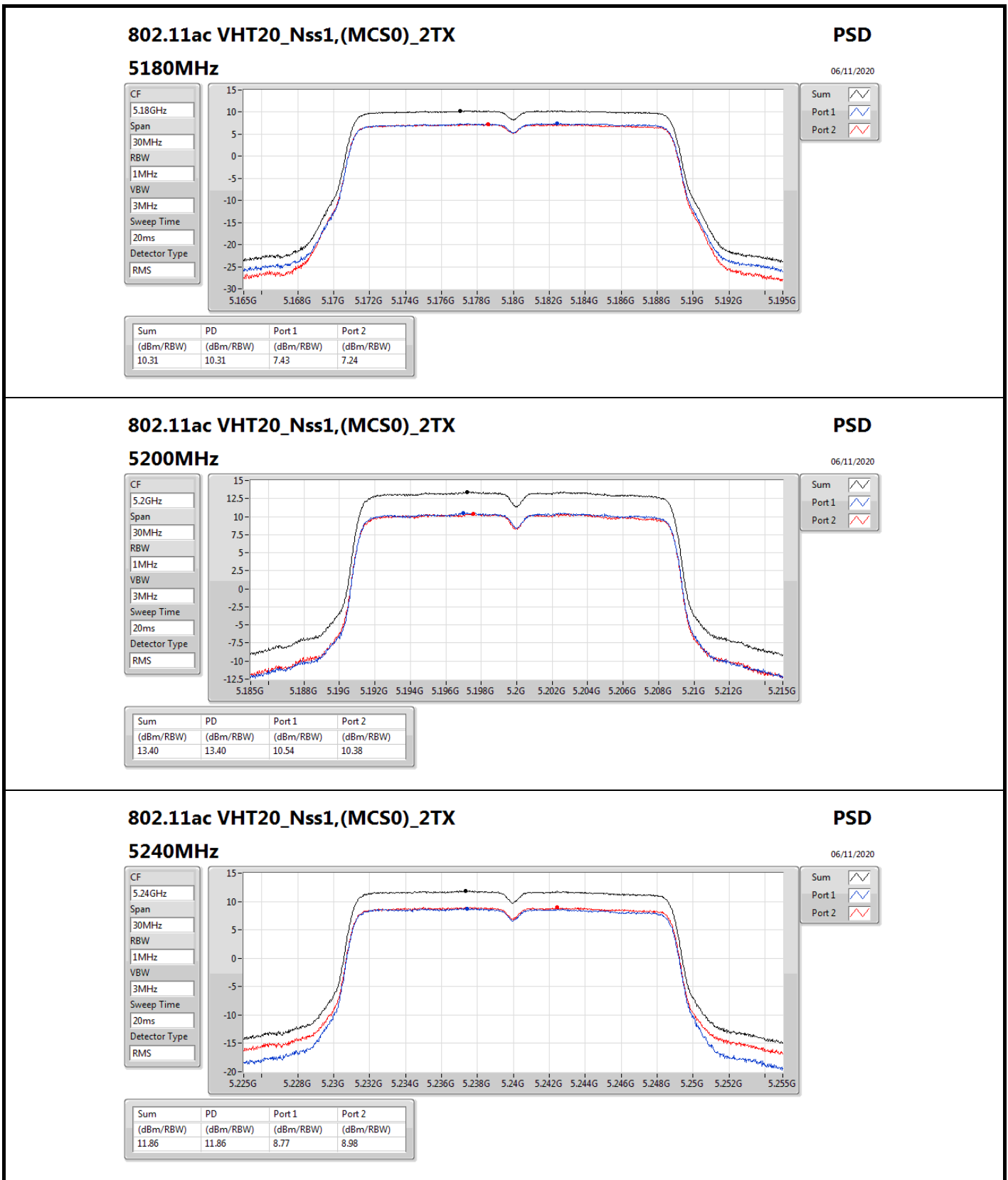
Test Mode: Mode 1



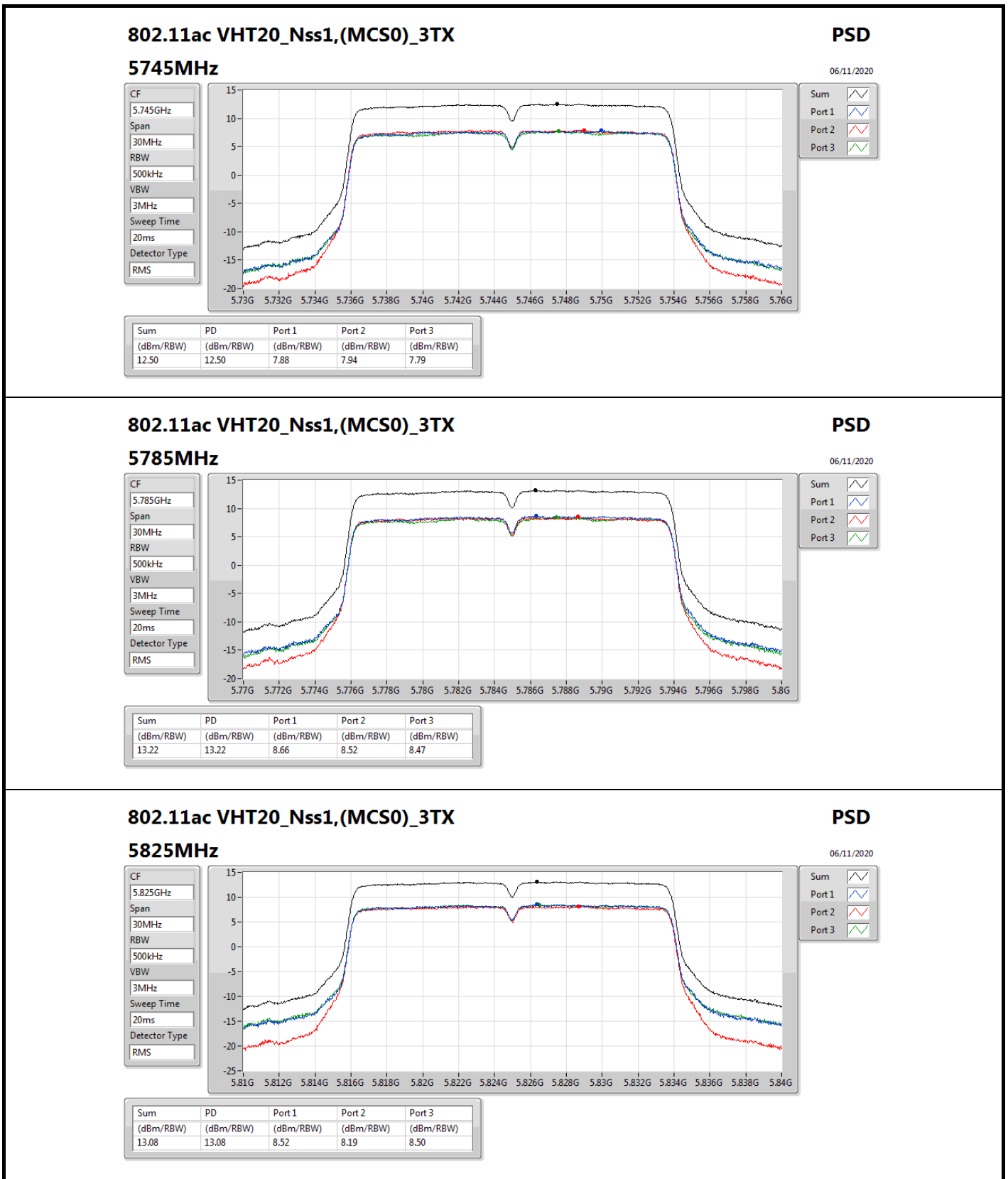
Test Mode: Mode 1



Test Mode: Mode 1



Test Mode: Mode 1



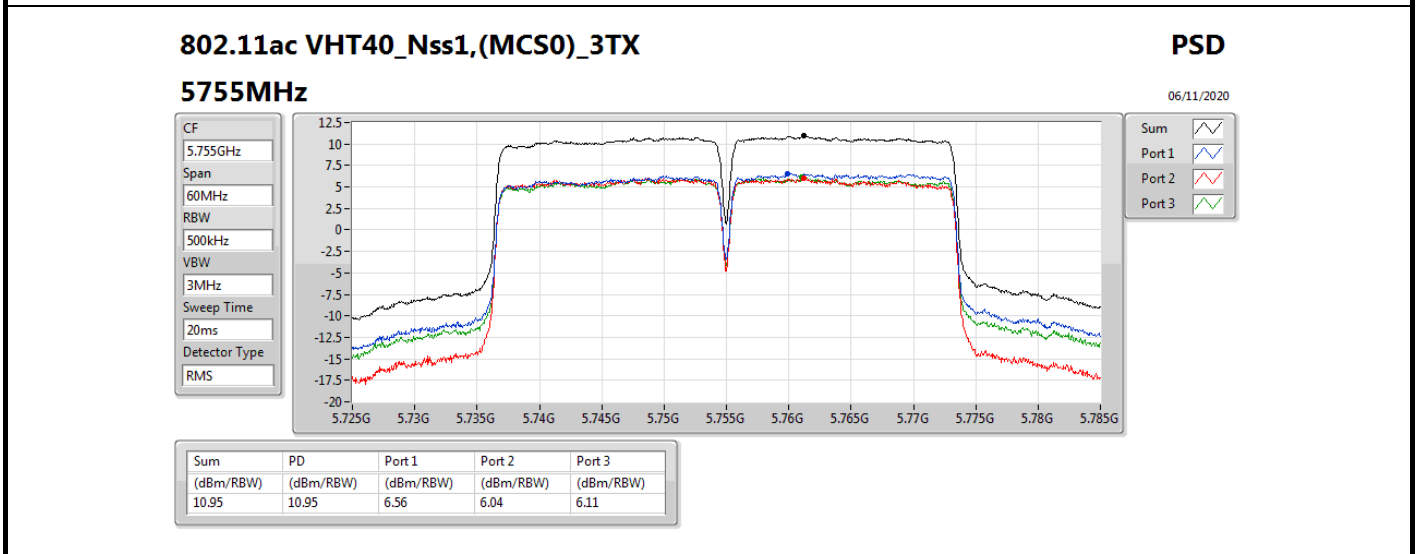
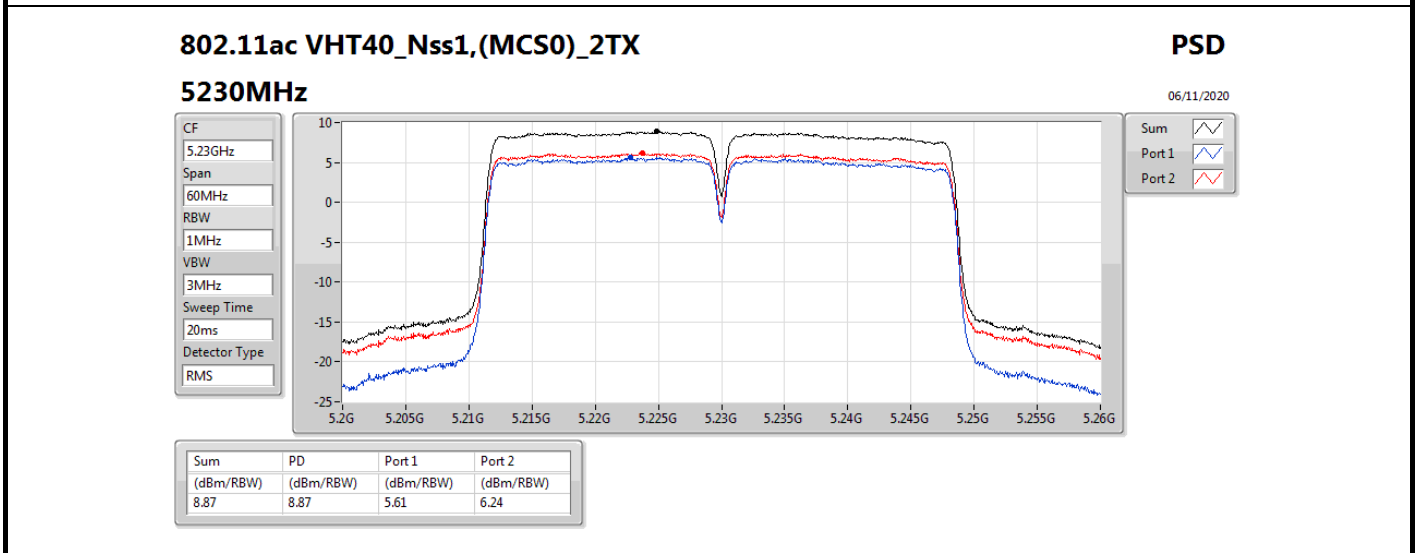
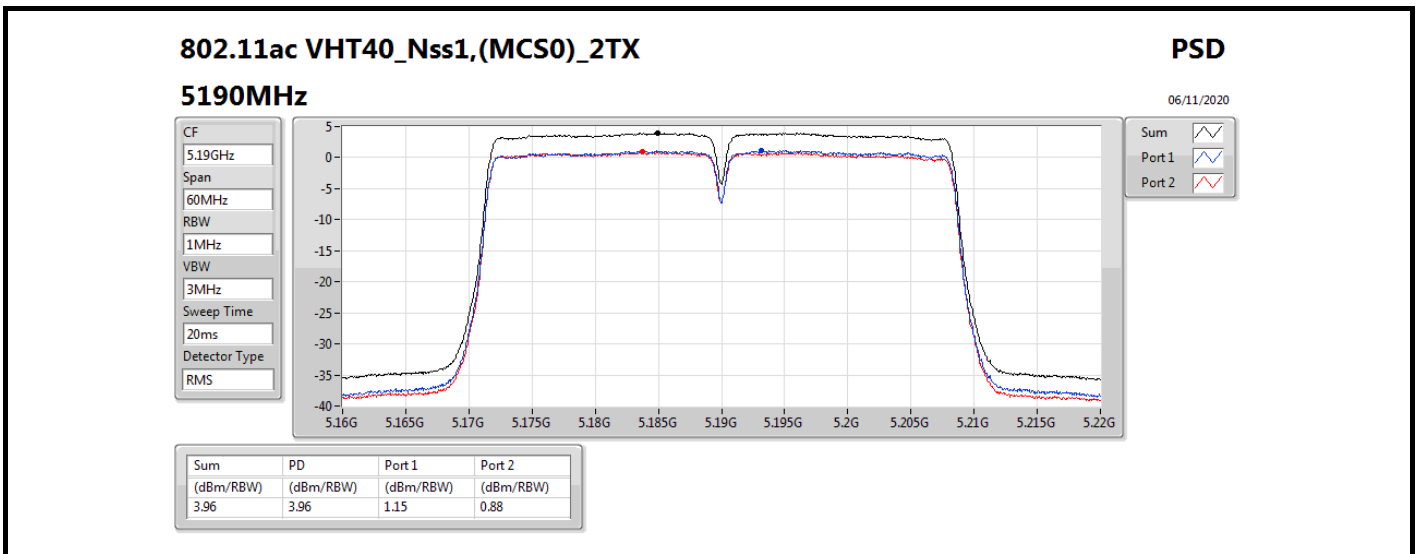
802.11ac VHT20_Nss1,(MCS0)_3TX

5825MHz

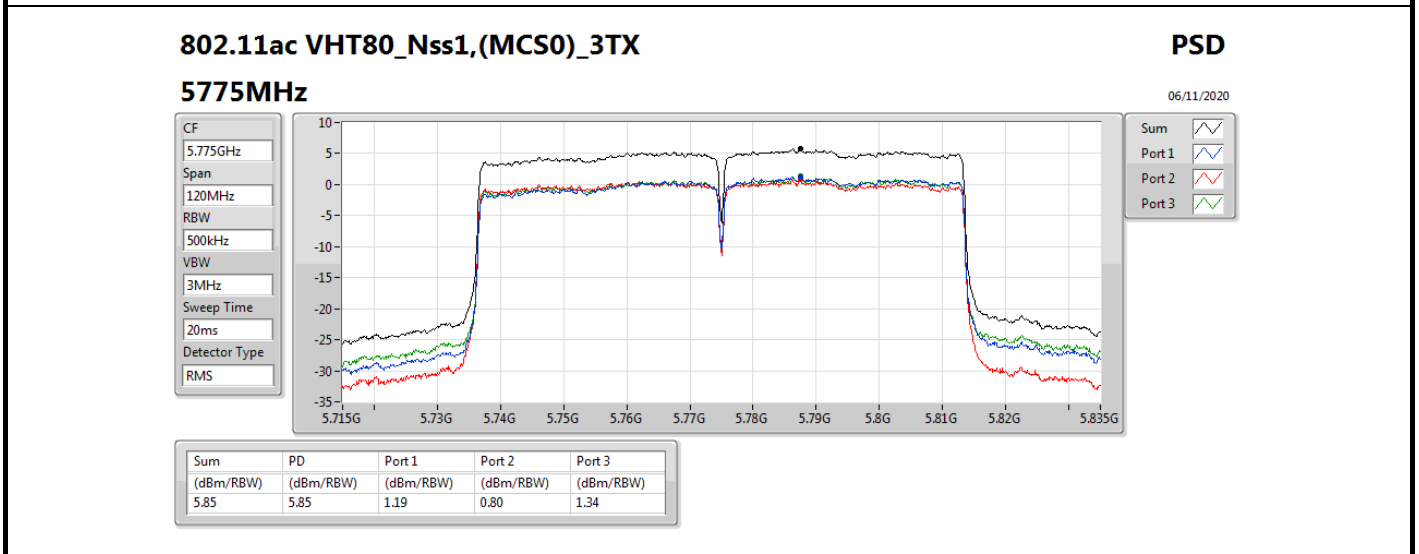
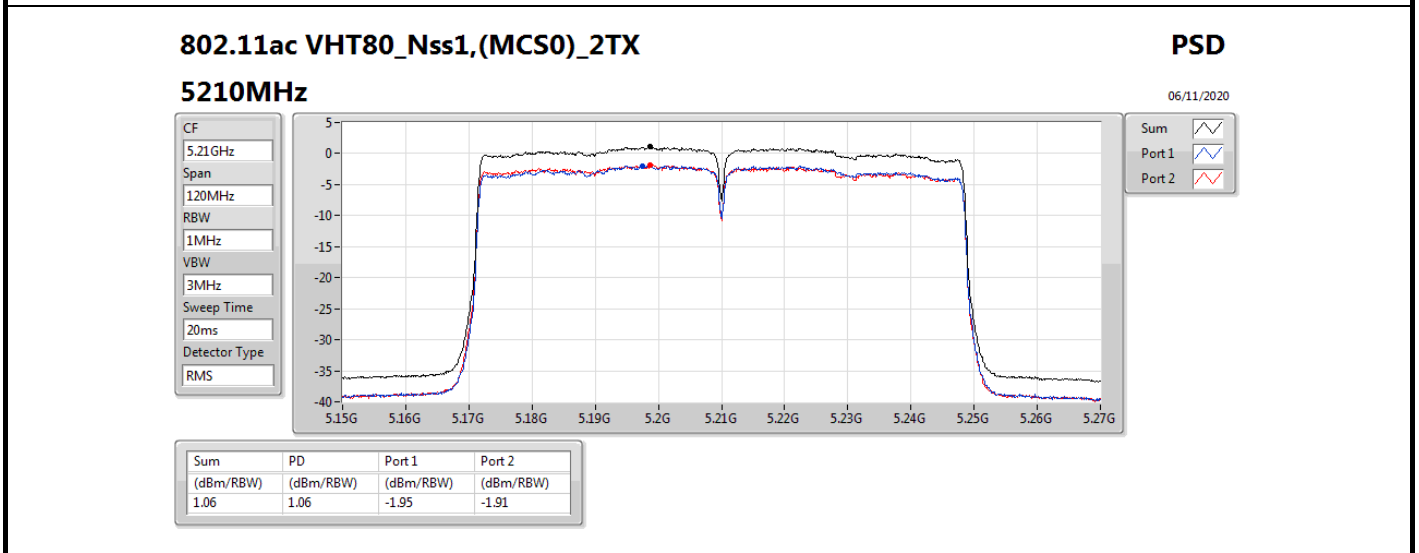
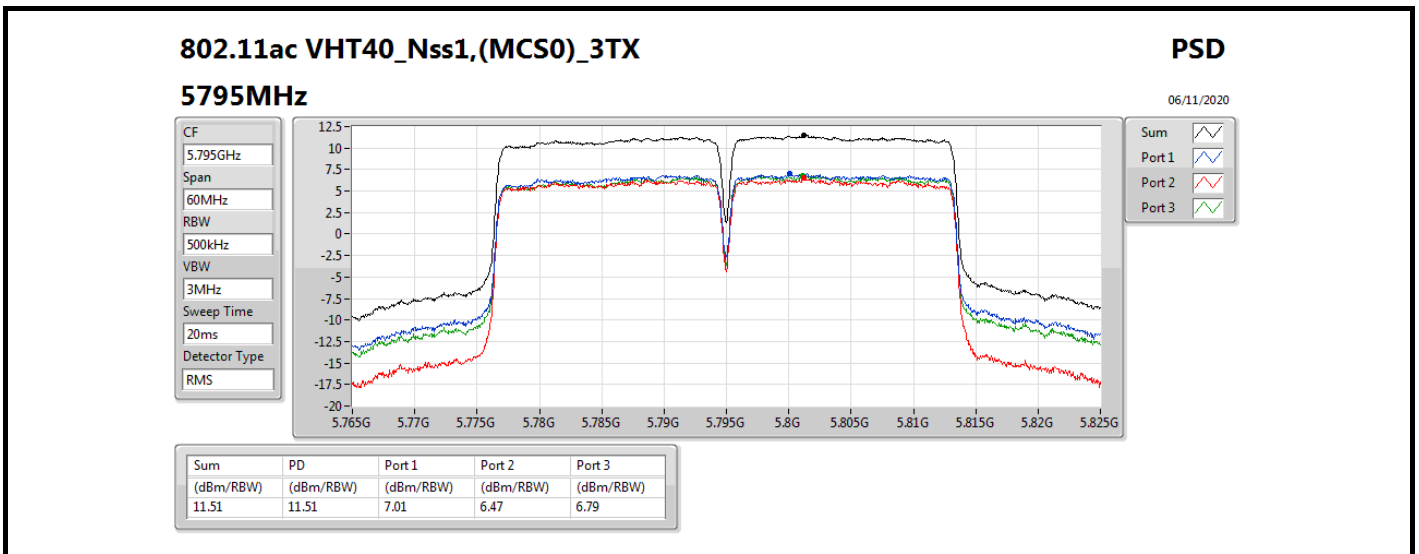
PSD

06/11/2020

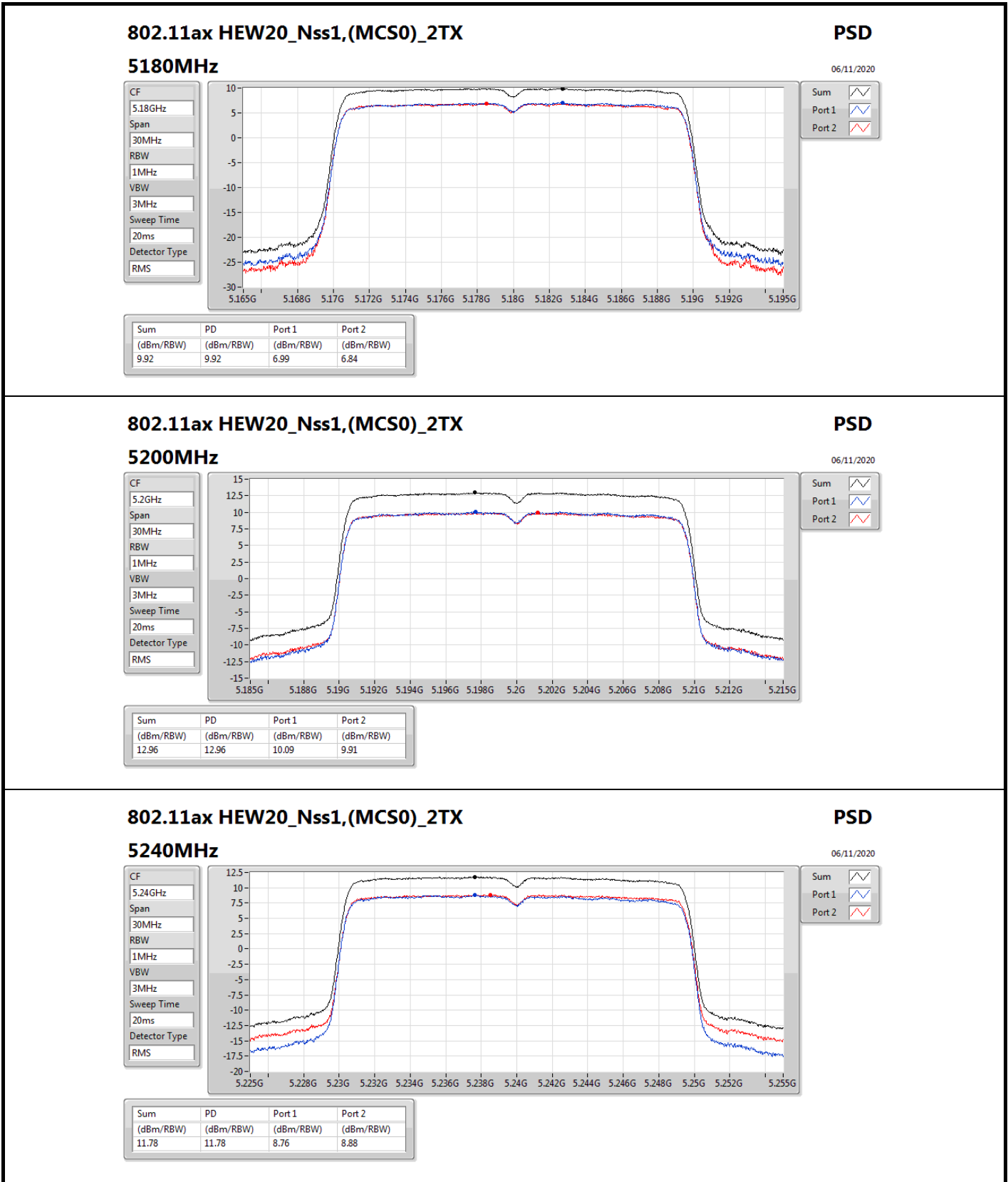
Test Mode: Mode 1



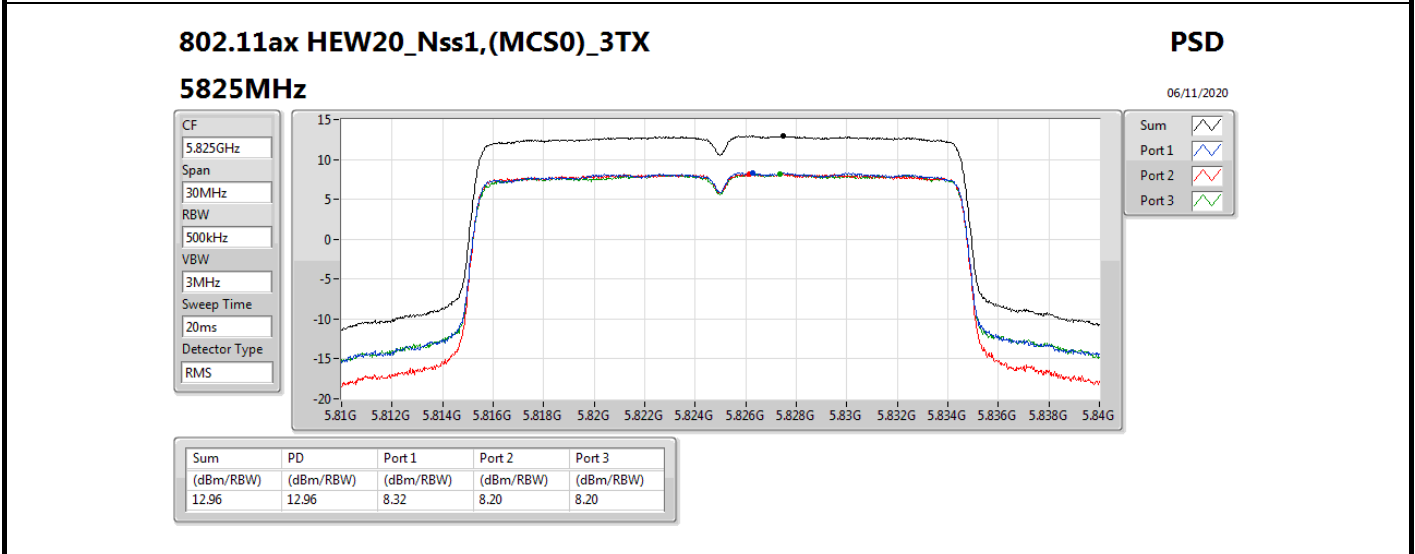
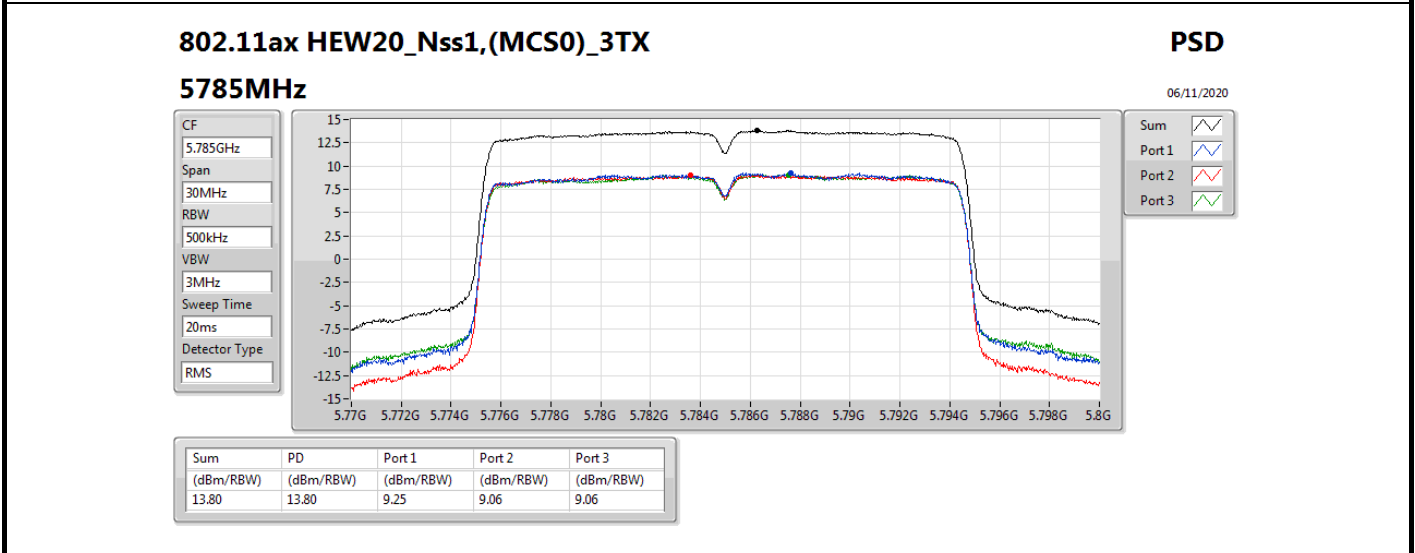
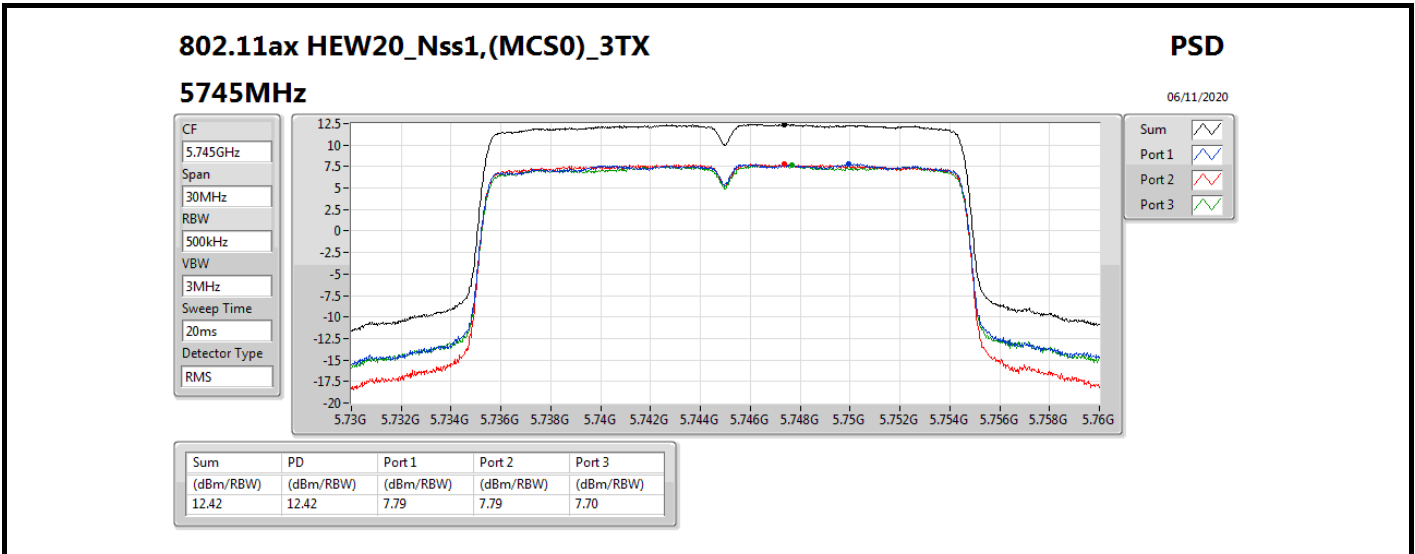
Test Mode: Mode 1



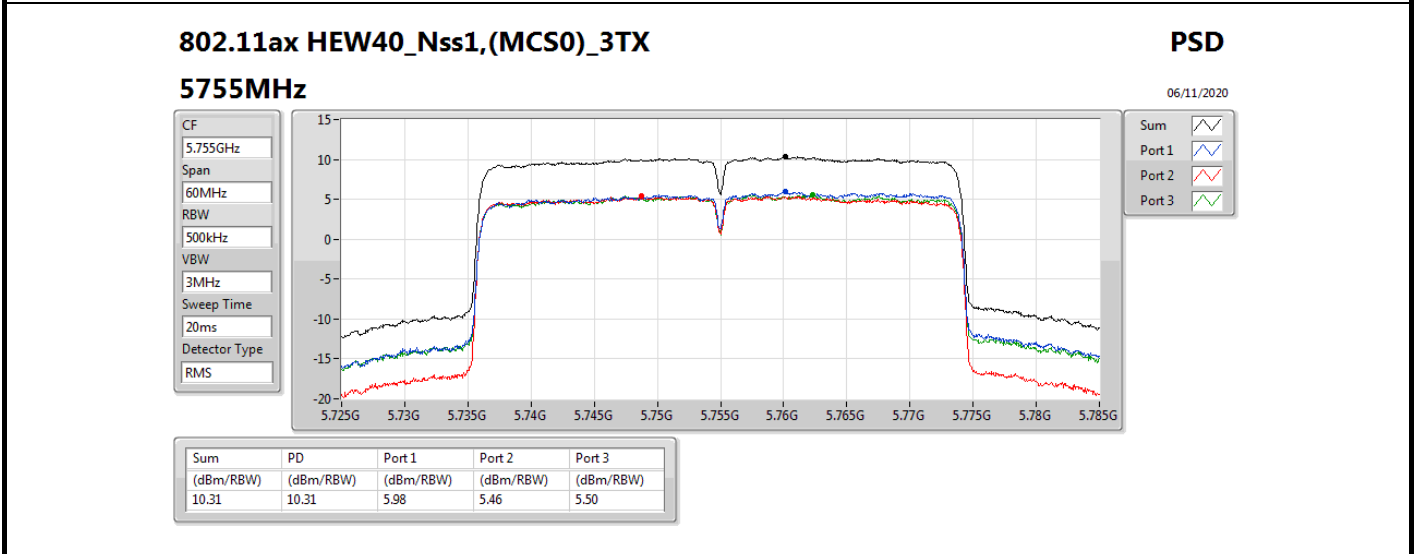
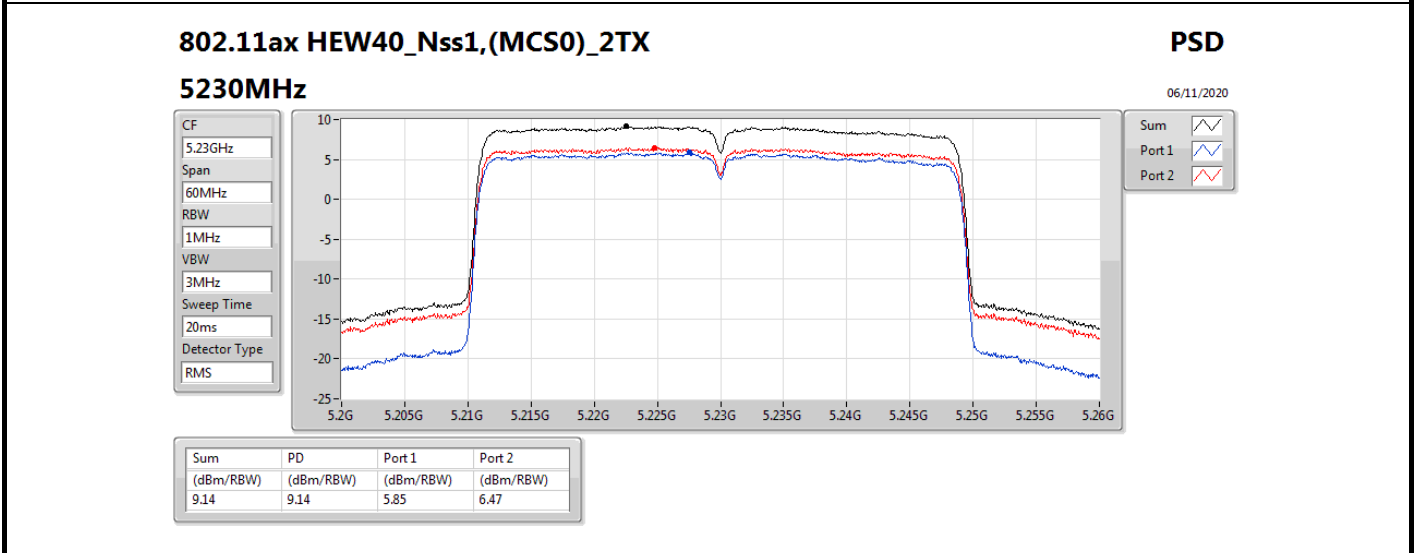
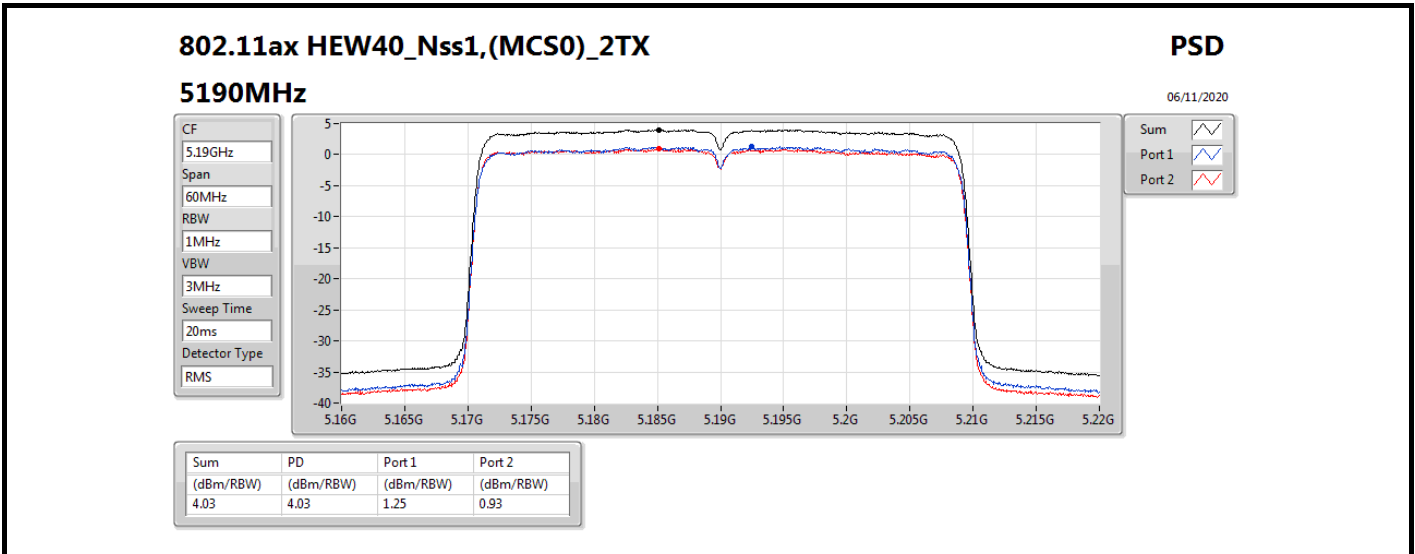
Test Mode: Mode 1



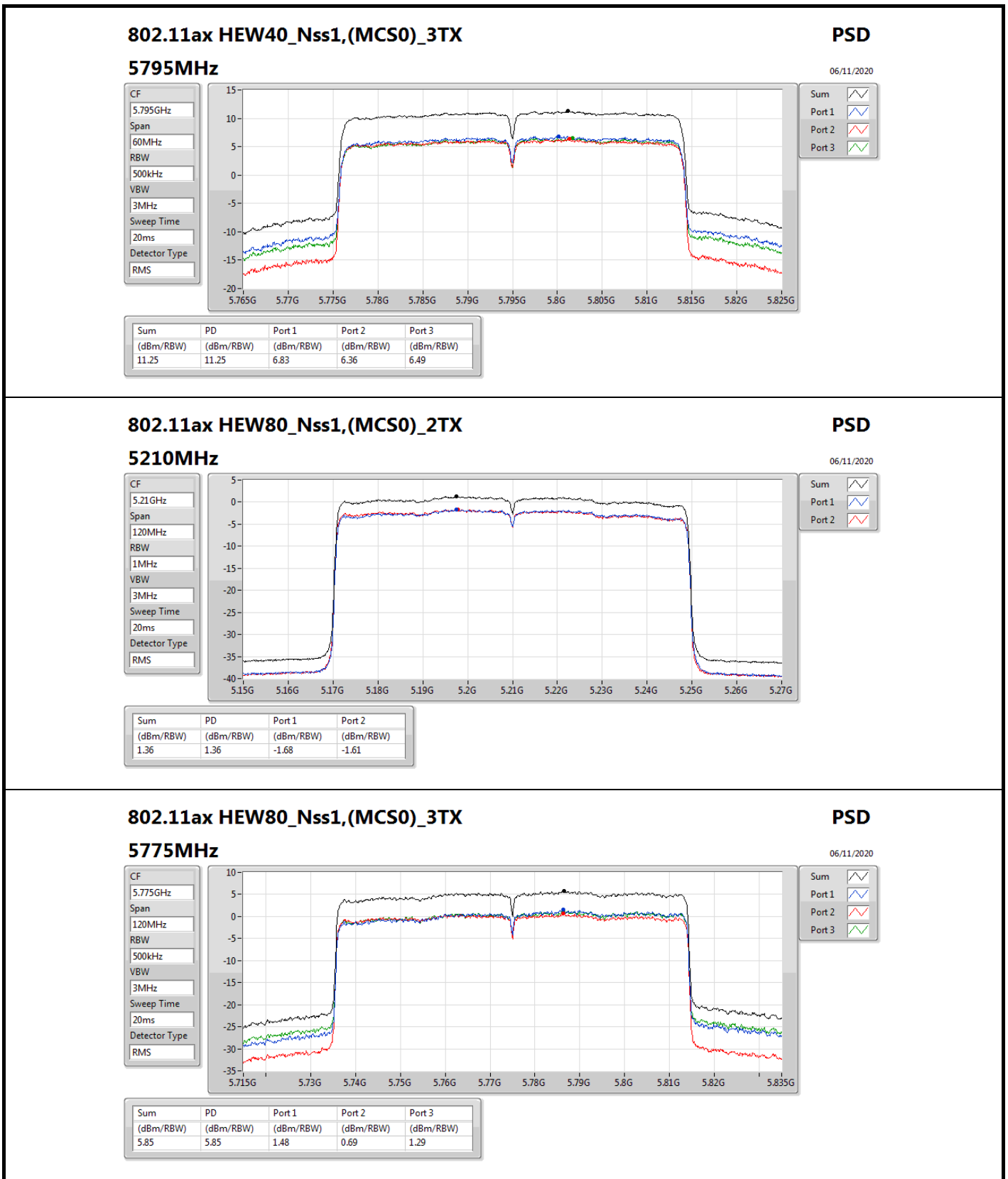
Test Mode: Mode 1



Test Mode: Mode 1



Test Mode: Mode 1





**Test Mode: Mode 2
Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	13.92
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	9.20
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	1.39
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	13.32
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	9.16
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.91
5.725-5.85GHz	-
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	13.30
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	11.68
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	5.97
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	14.50
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	11.46
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	6.14

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

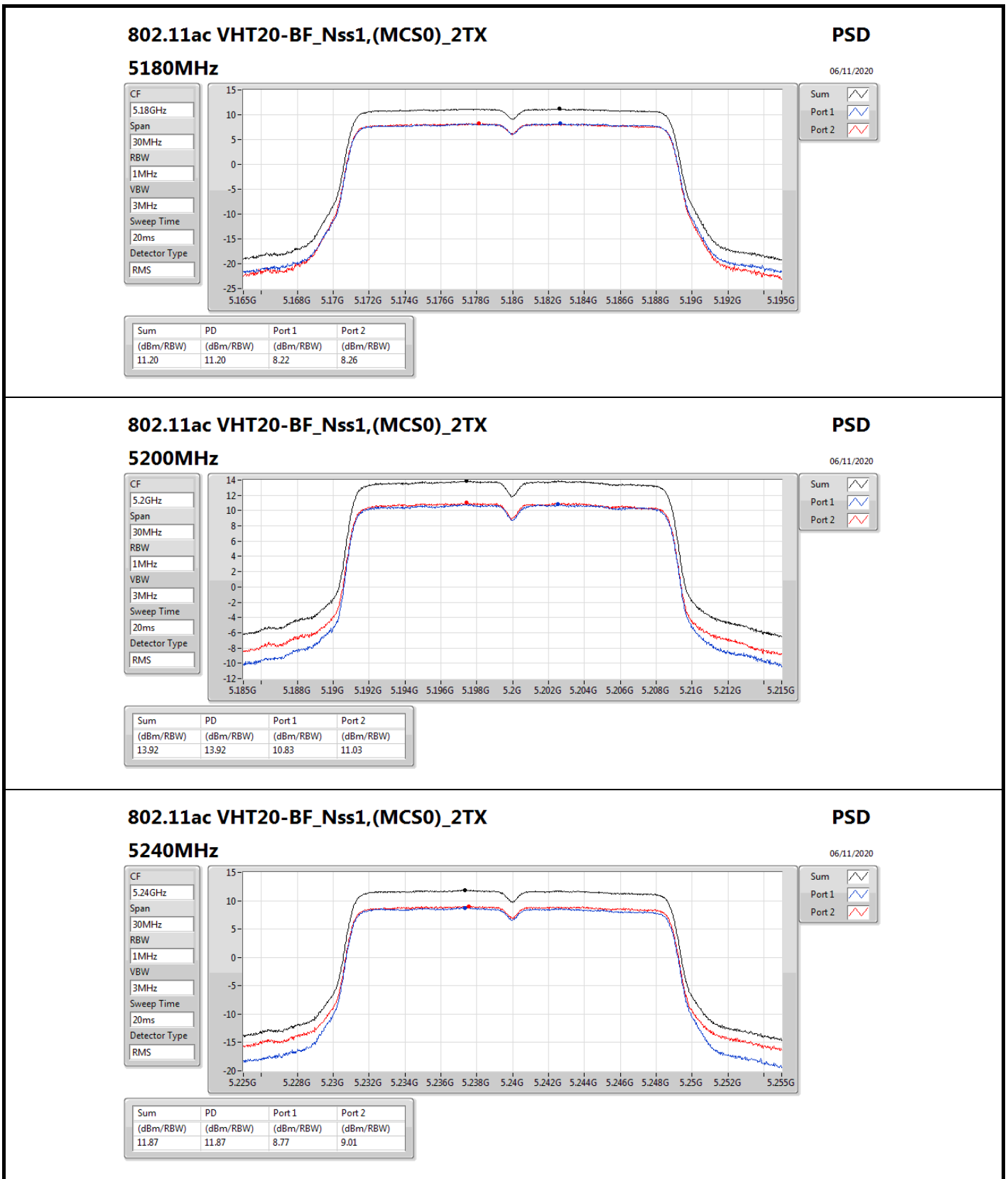
**Test Mode: Mode 2
Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	8.22	8.26	-	11.20	17.00
5200MHz	Pass	5.58	10.83	11.03	-	13.92	17.00
5240MHz	Pass	5.58	8.77	9.01	-	11.87	17.00
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	7.92	7.84	7.82	12.54	30.00
5785MHz	Pass	5.76	8.74	8.57	8.47	13.30	30.00
5825MHz	Pass	5.76	8.11	7.90	7.98	12.70	30.00
802.11ac VHT40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	1.52	1.33	-	4.35	17.00
5230MHz	Pass	5.58	5.96	6.52	-	9.20	17.00
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	6.59	6.15	6.18	10.98	30.00
5795MHz	Pass	5.76	7.19	6.73	6.94	11.68	30.00
802.11ac VHT80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	-1.56	-1.66	-	1.39	17.00
802.11ac VHT80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	5.76	1.35	0.70	1.59	5.97	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz	Pass	5.58	7.02	6.91	-	9.90	17.00
5200MHz	Pass	5.58	10.42	10.25	-	13.32	17.00
5240MHz	Pass	5.58	8.82	8.96	-	11.82	17.00
802.11ax HEW20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5745MHz	Pass	5.76	9.27	9.41	9.27	13.96	30.00
5785MHz	Pass	5.76	9.98	9.60	9.75	14.50	30.00
5825MHz	Pass	5.76	9.88	9.62	9.64	14.44	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz	Pass	5.58	1.20	0.96	-	4.01	17.00
5230MHz	Pass	5.58	5.90	6.47	-	9.16	17.00
802.11ax HEW40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5755MHz	Pass	5.76	6.21	5.61	5.64	10.47	30.00
5795MHz	Pass	5.76	6.98	6.40	6.74	11.46	30.00
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz	Pass	5.58	-2.08	-1.99	-	0.91	17.00
802.11ax HEW80-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	5.76	1.72	0.96	1.63	6.14	30.00

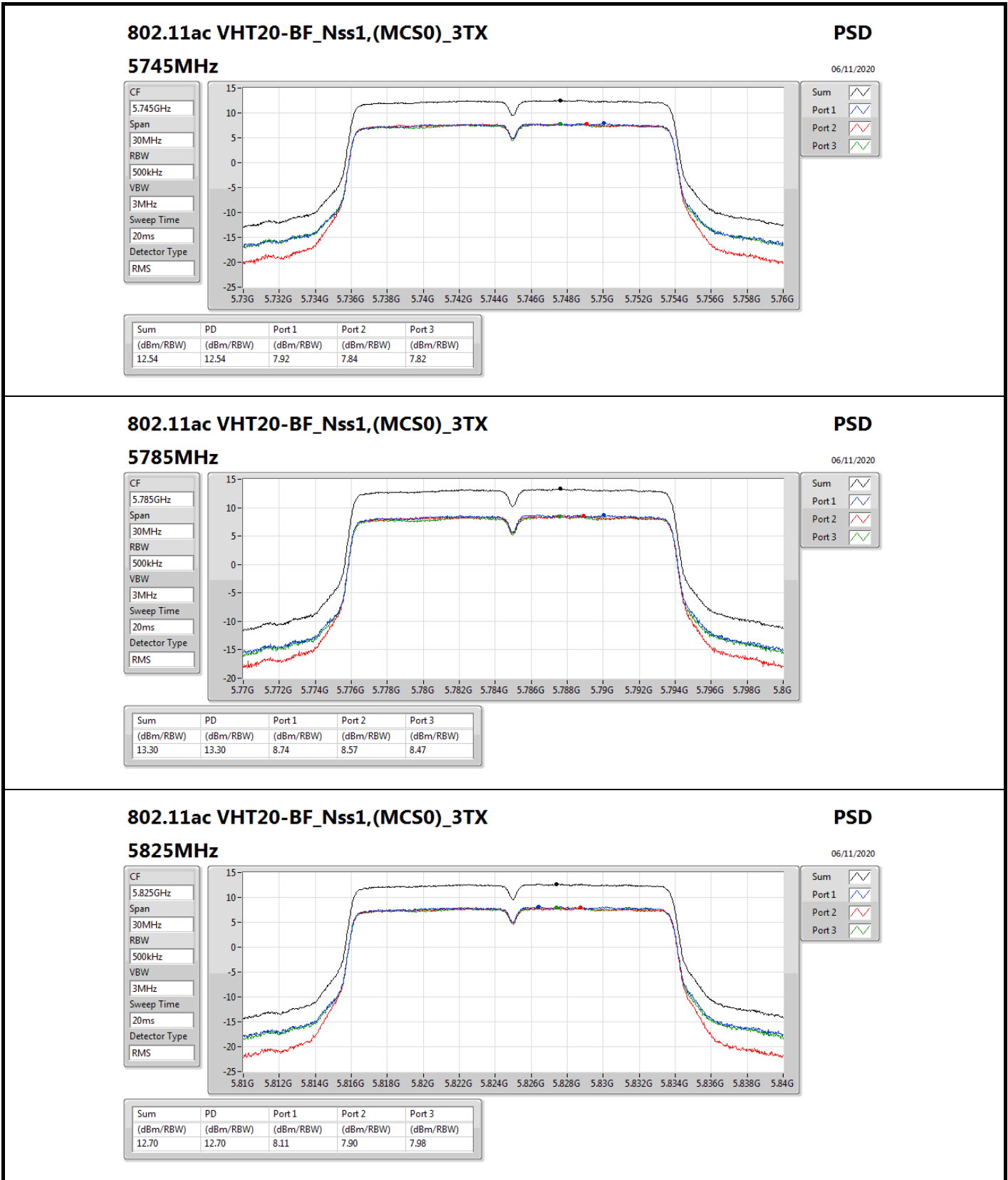
DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

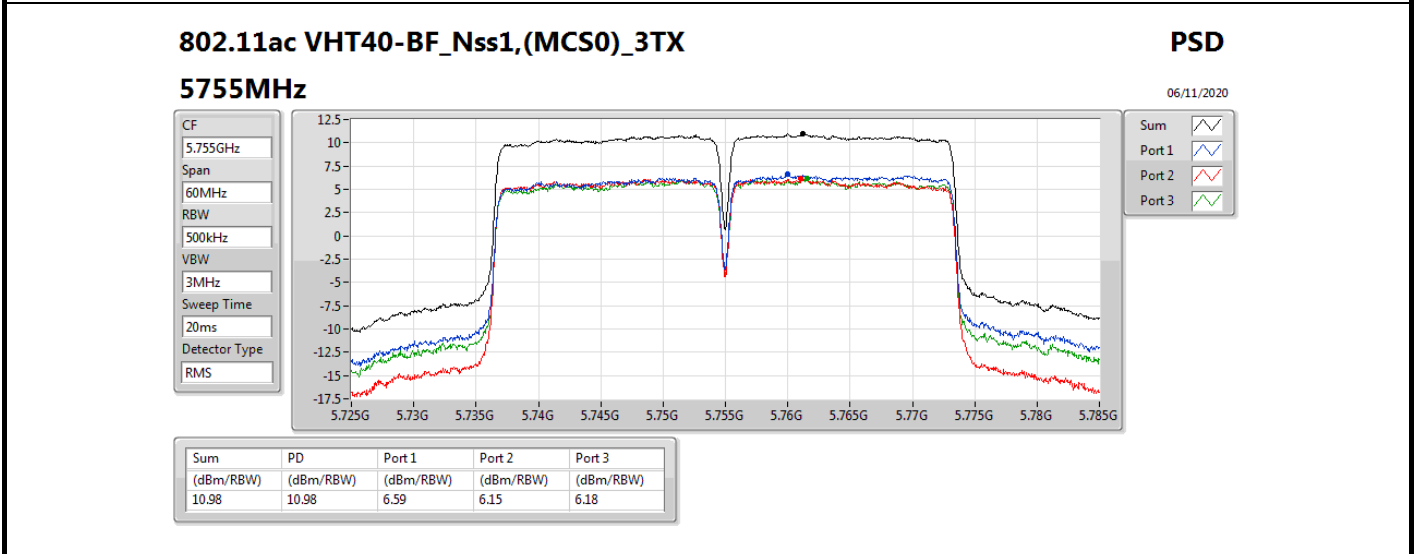
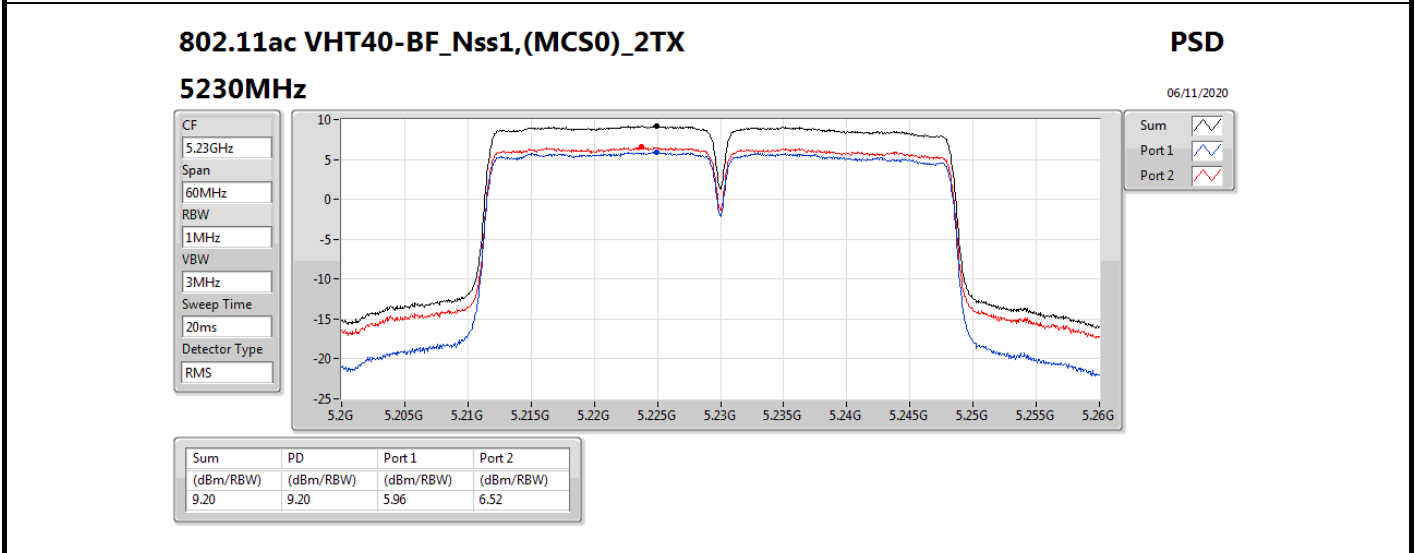
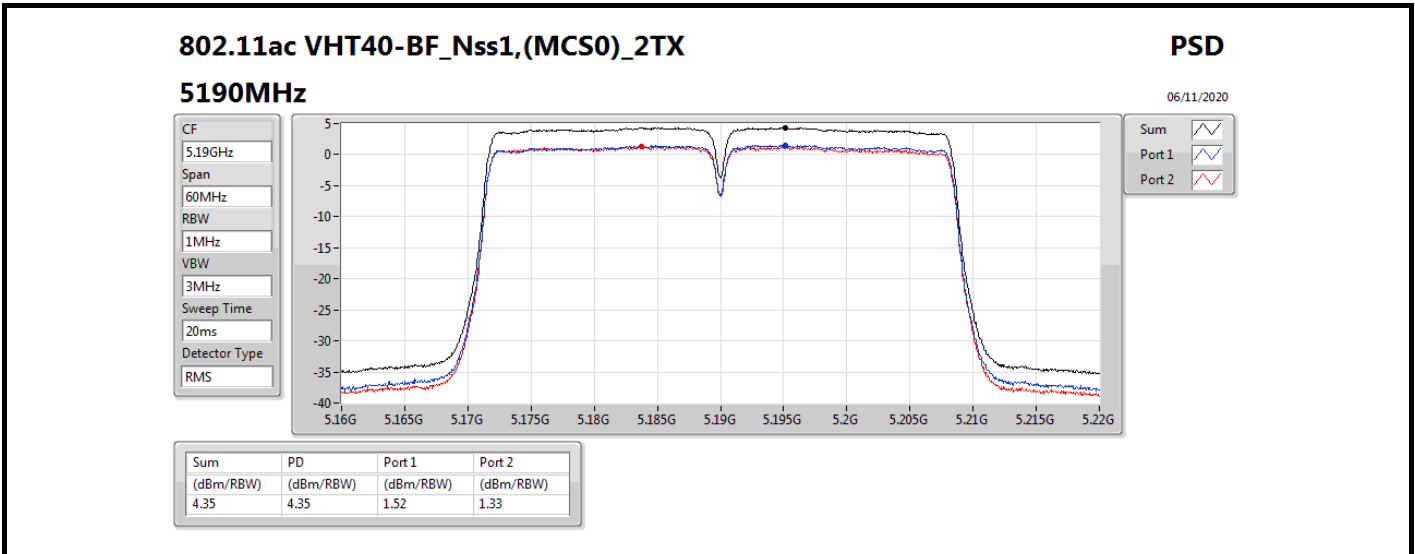
Test Mode: Mode 2



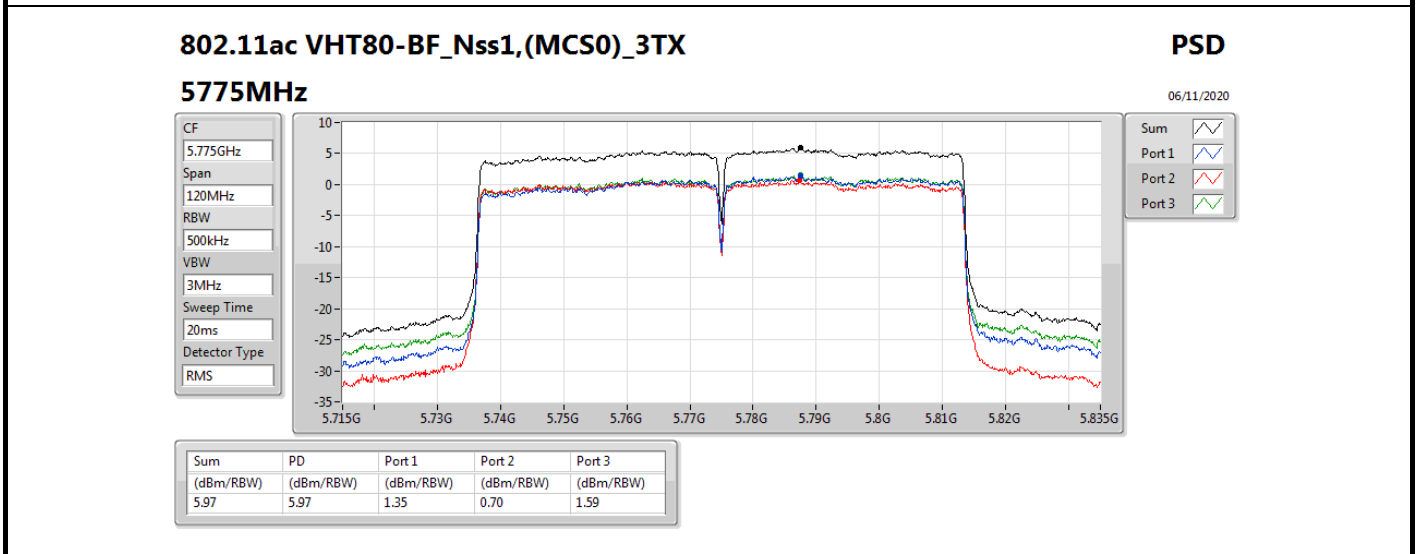
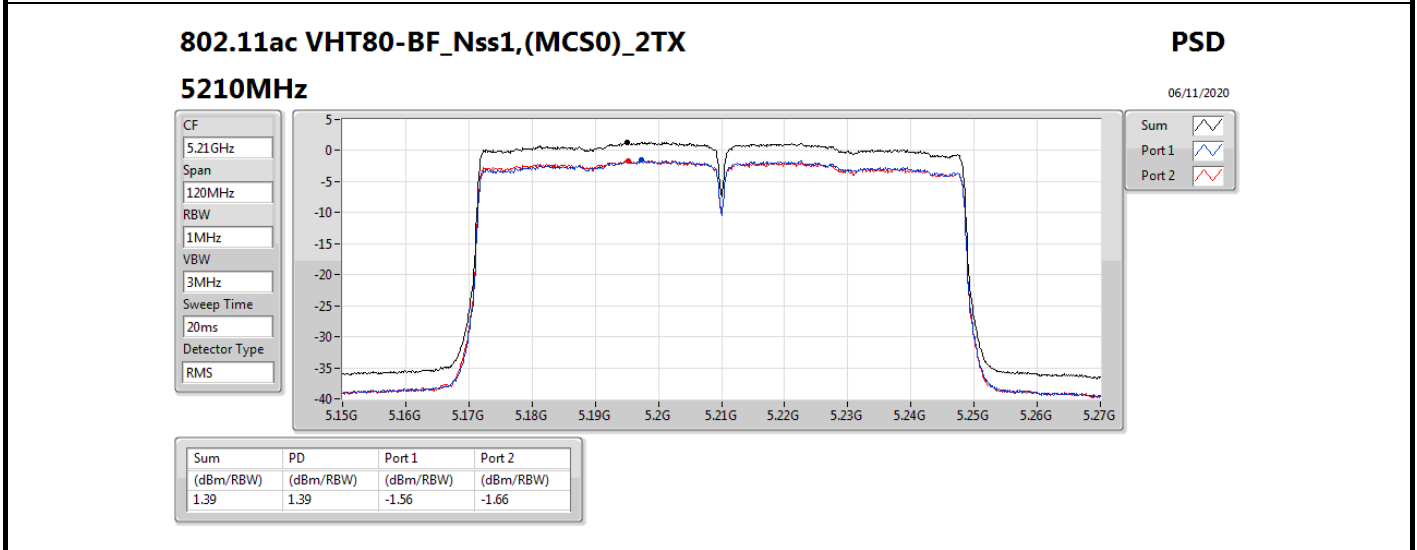
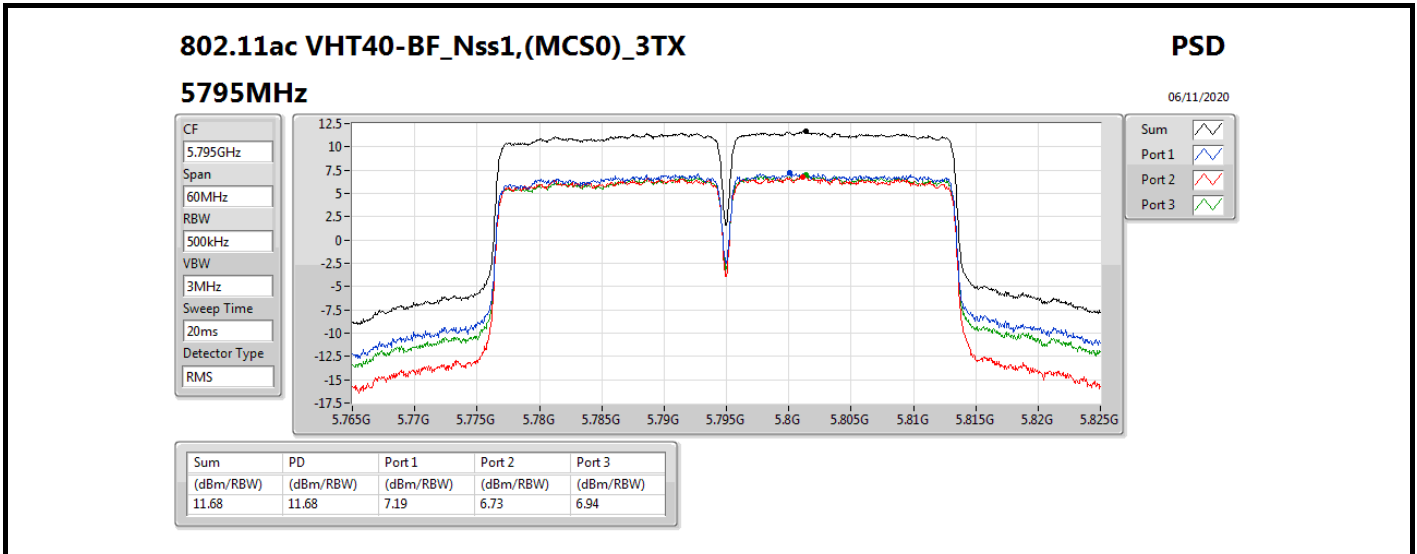
Test Mode: Mode 2



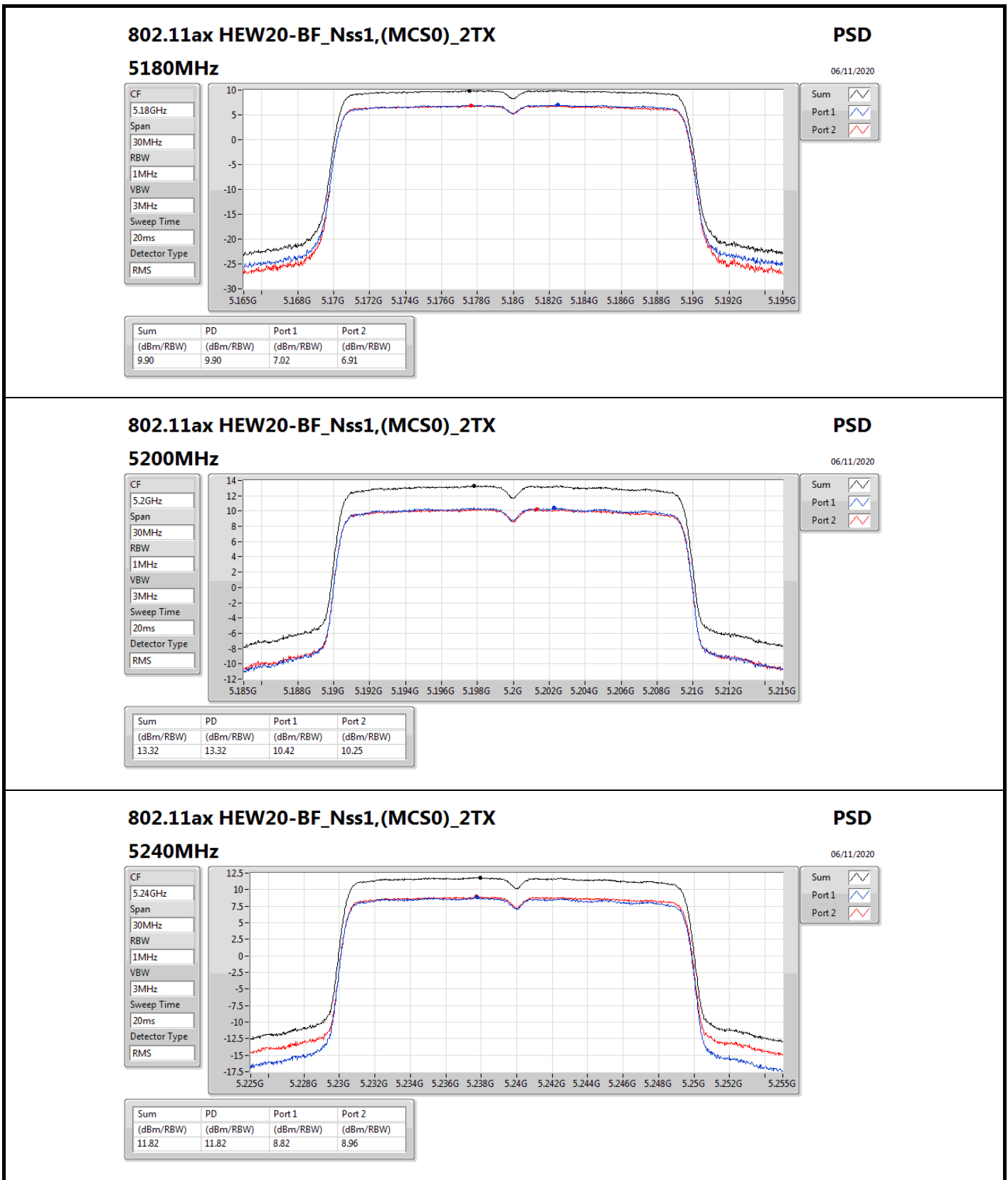
Test Mode: Mode 2



Test Mode: Mode 2



Test Mode: Mode 2



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

5240MHz

PSD

06/11/2020

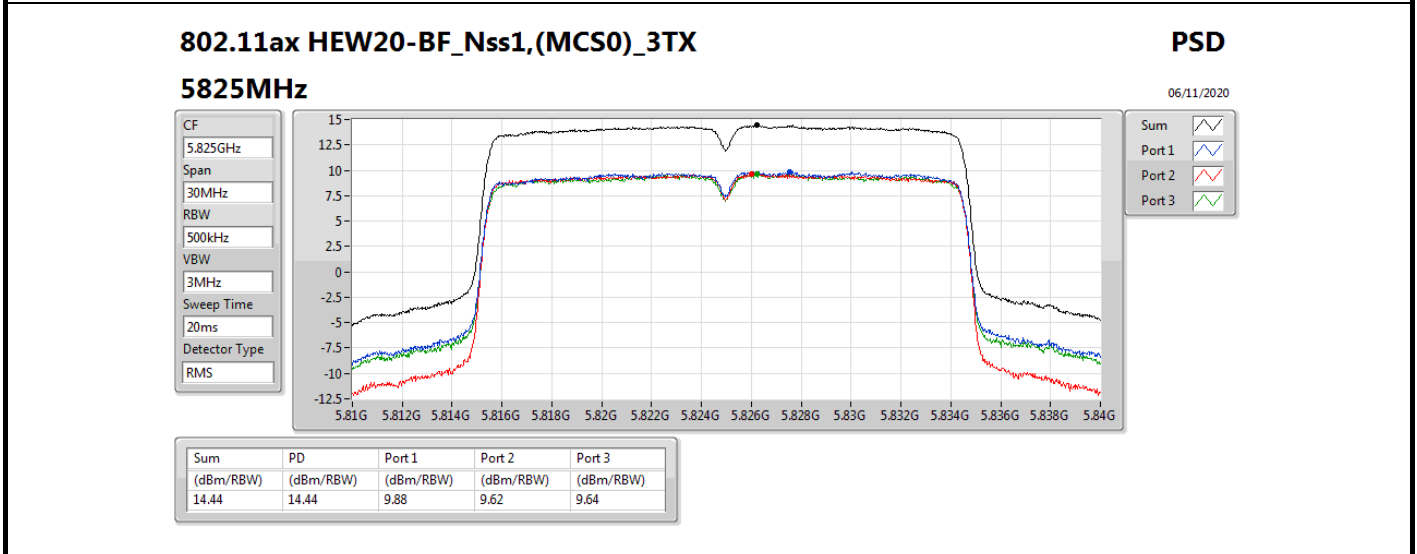
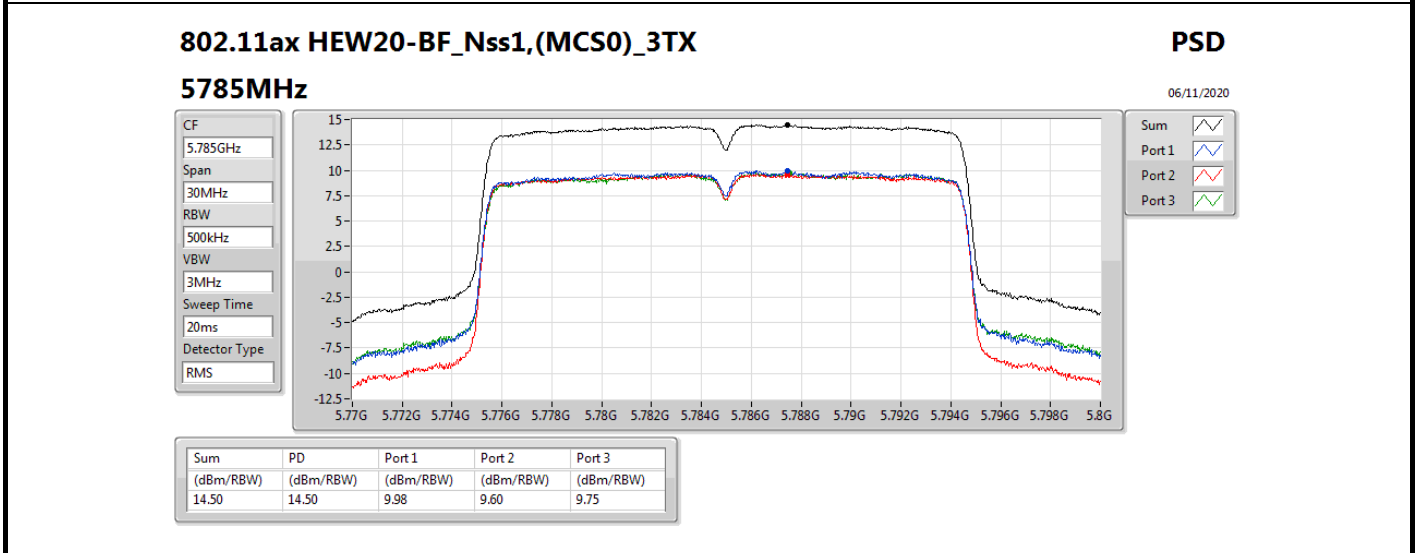
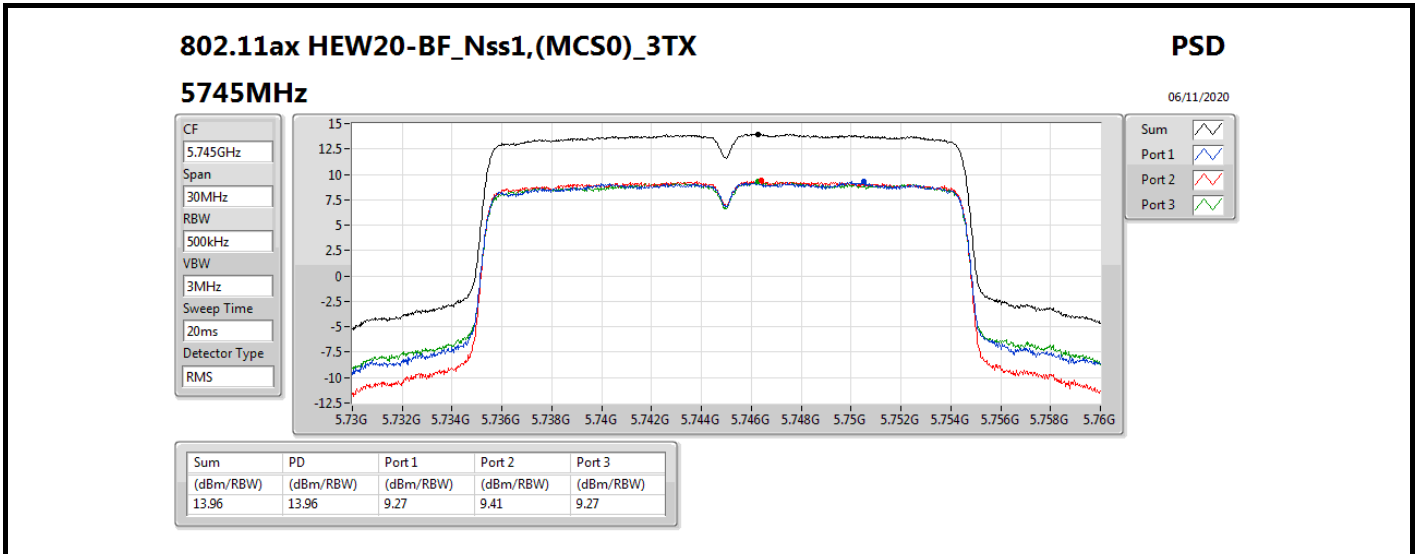
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.82	11.82	8.82	8.96

Sum

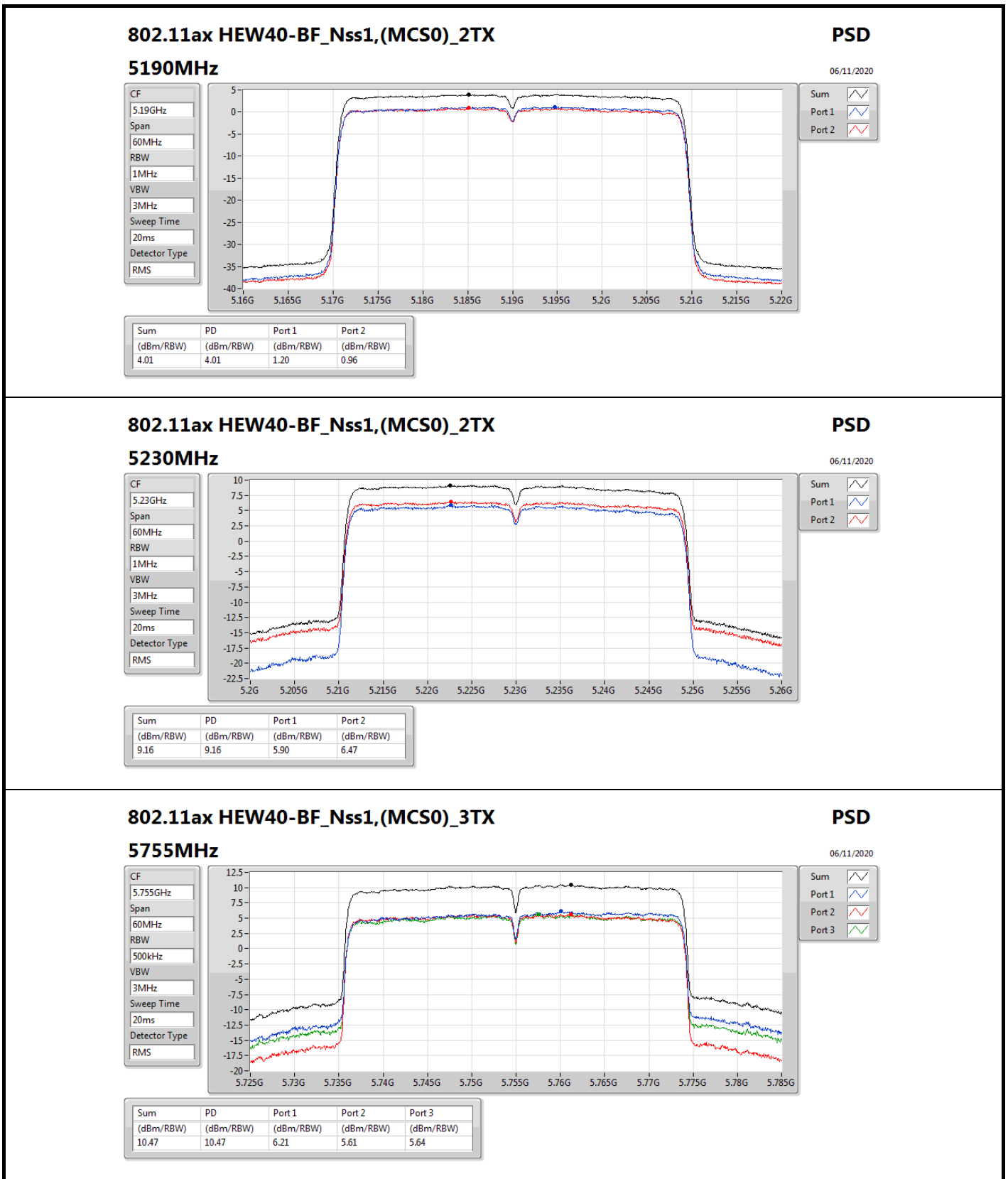
Port 1

Port 2

Test Mode: Mode 2



Test Mode: Mode 2



802.11ax HEW40-BF_Nss1,(MCS0)_3TX

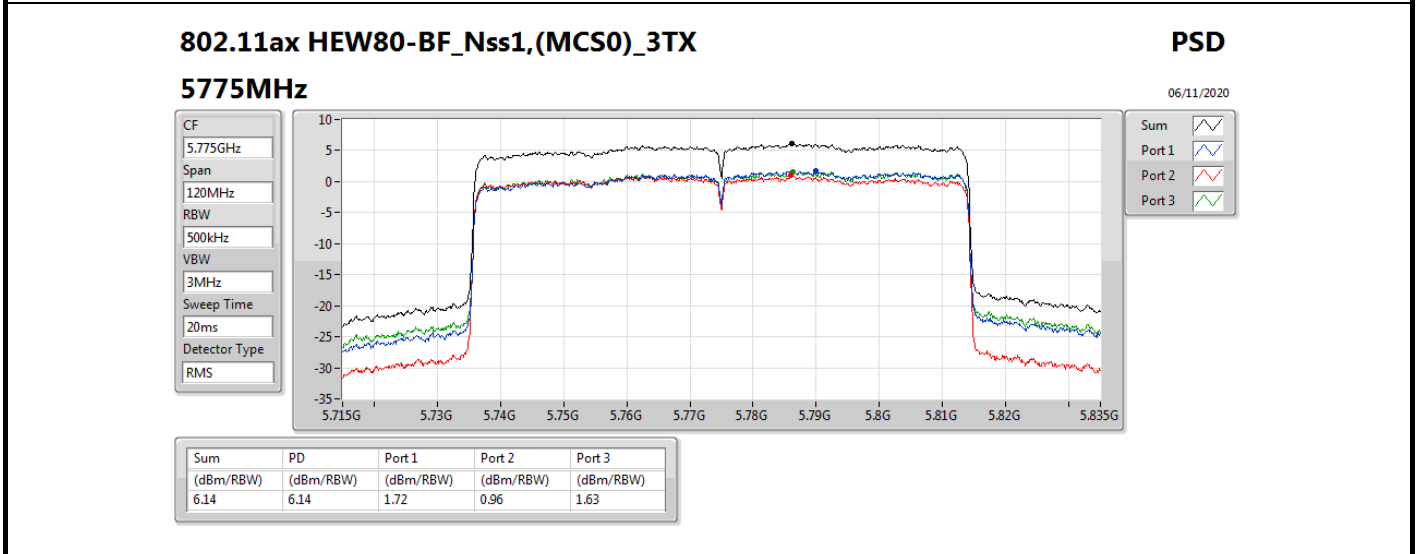
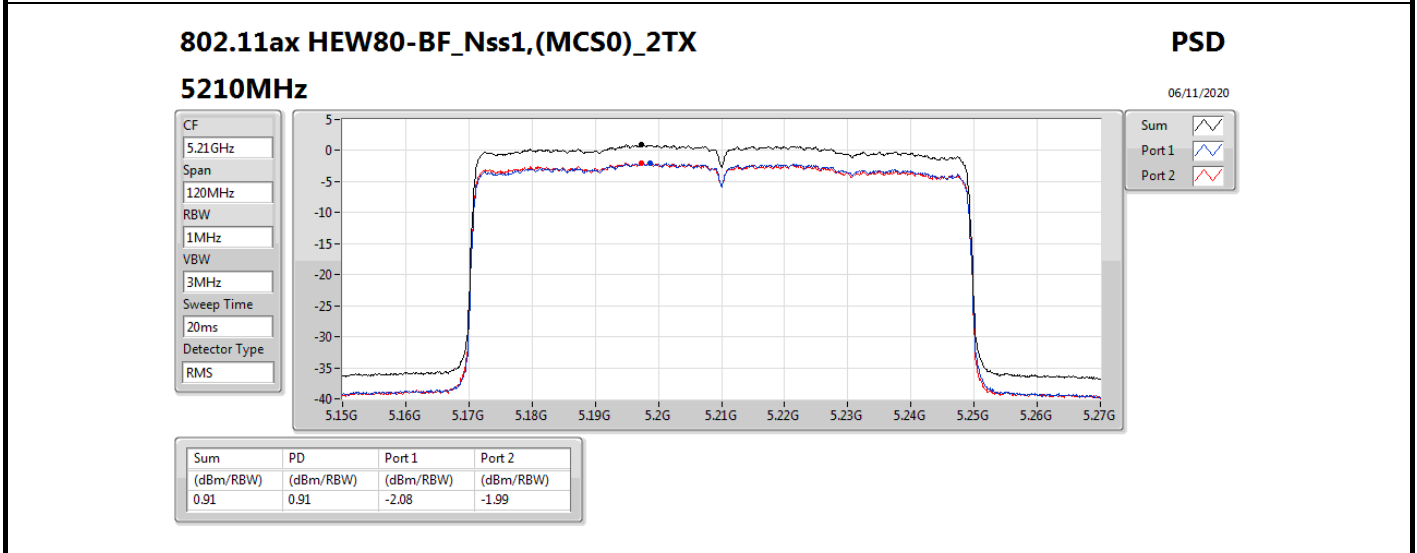
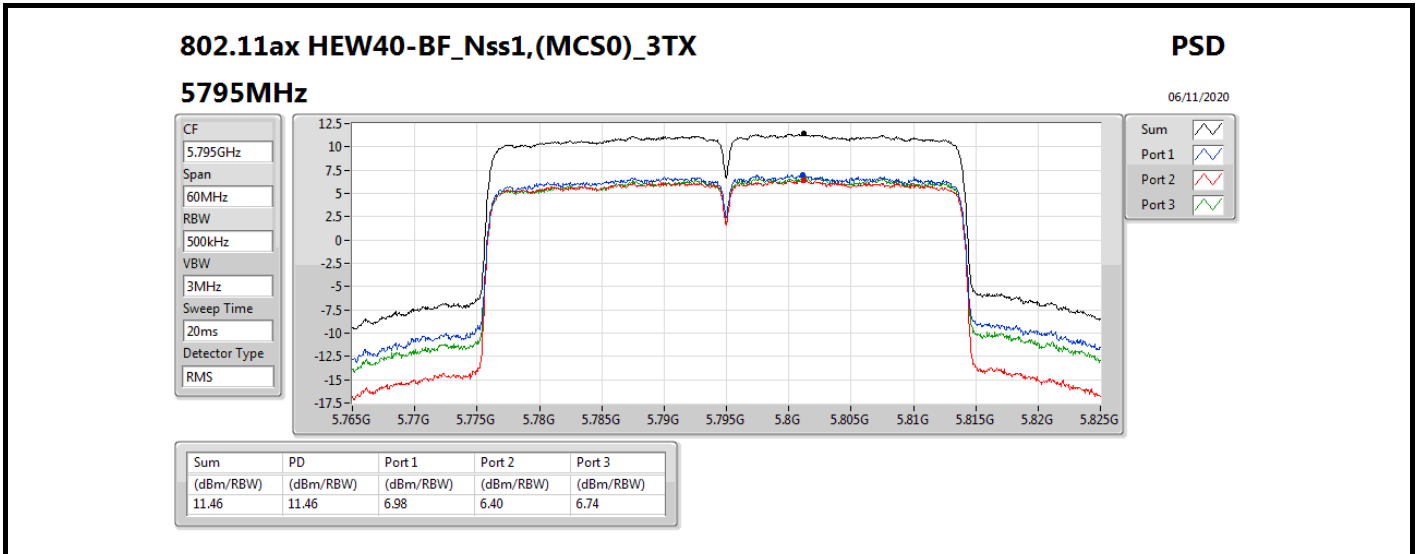
5755MHz

PSD

06/11/2020

Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.47	10.47	6.21	5.61	5.64

Test Mode: Mode 2





**Test Mode: Mode 3
Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11ac VHT20_Nss2,(MCS0)_2TX	10.40
802.11ac VHT40_Nss2,(MCS0)_2TX	4.98
802.11ac VHT80_Nss2,(MCS0)_2TX	1.72
802.11ax HEW20_Nss2,(MCS0)_2TX	9.06
802.11ax HEW40_Nss2,(MCS0)_2TX	3.94
802.11ax HEW80_Nss2,(MCS0)_2TX	0.87

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



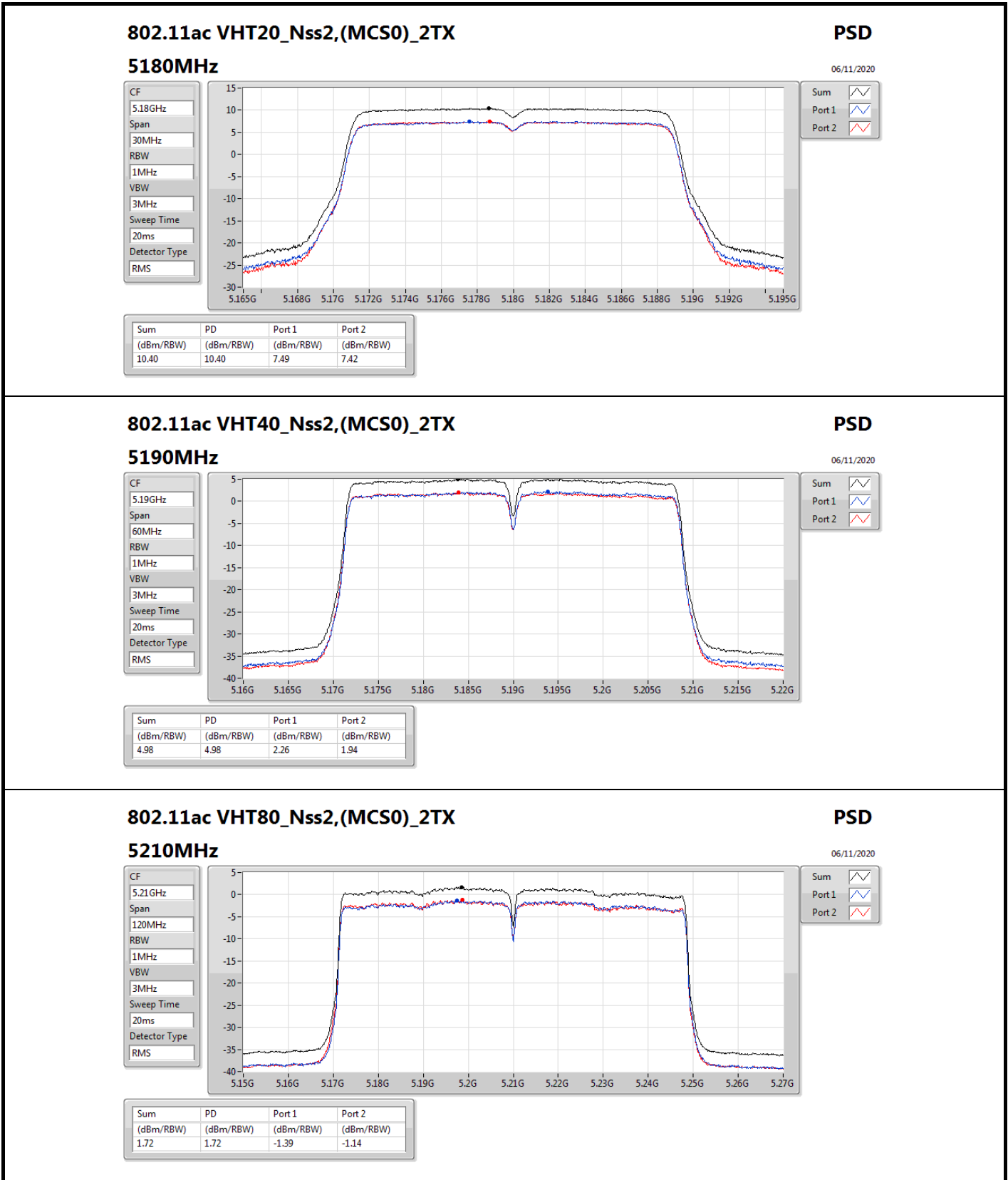
**Test Mode: Mode 3
Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.57	7.49	7.42	10.40	17.00
802.11ac VHT40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.57	2.26	1.94	4.98	17.00
802.11ac VHT80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.57	-1.39	-1.14	1.72	17.00
802.11ax HEW20_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	2.57	6.21	6.01	9.06	17.00
802.11ax HEW40_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	2.57	1.16	0.85	3.94	17.00
802.11ax HEW80_Nss2,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	2.57	-2.06	-2.23	0.87	17.00

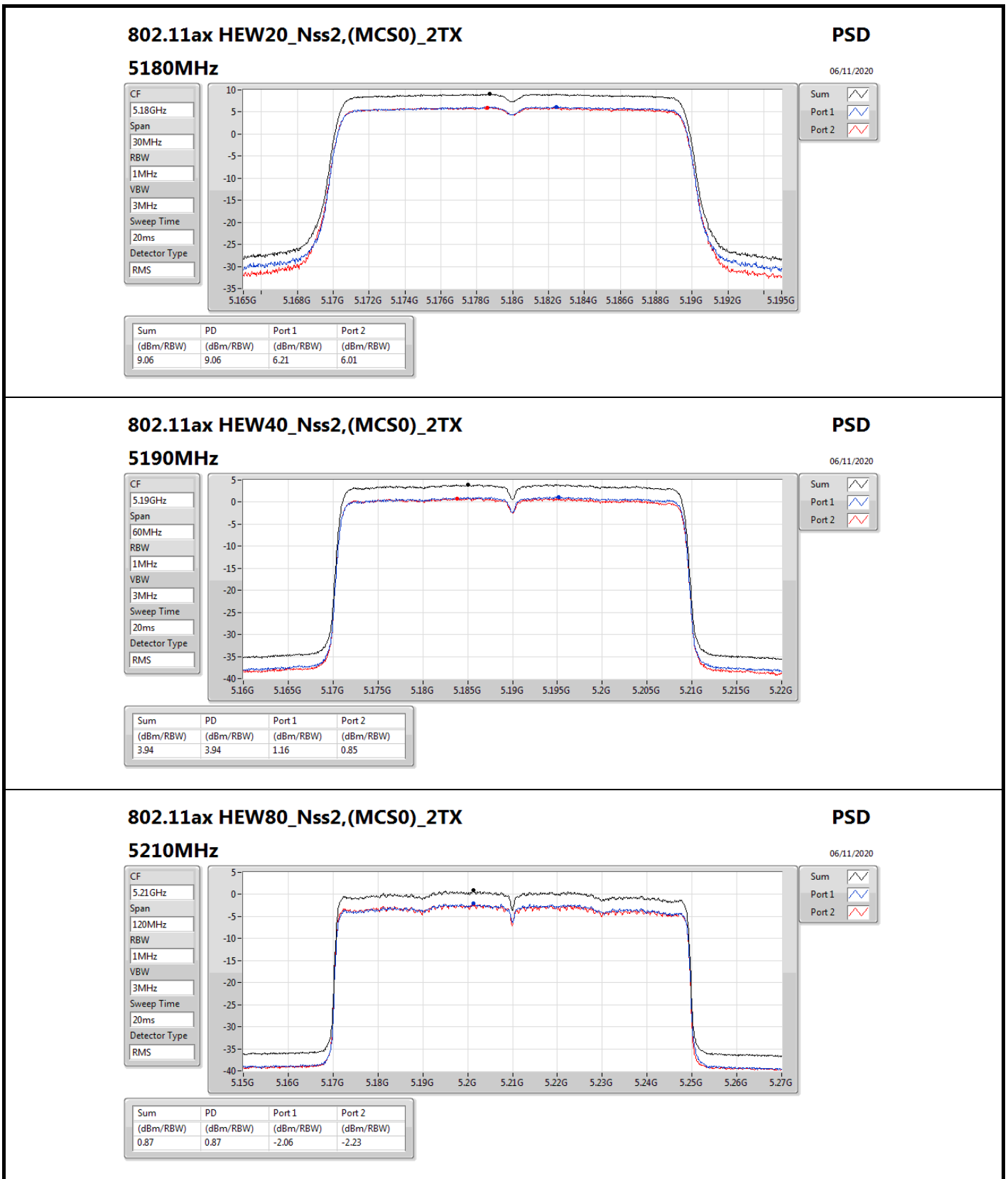
DG = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

Test Mode: Mode 3



Test Mode: Mode 3



802.11ax HEW80_Nss2,(MCS0)_2TX

5210MHz

PSD

06/11/2020

CF

5.21GHz

Span

120MHz

RBW

1MHz

VBW

3MHz

Sweep Time

20ms

Detector Type

RMS



Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.87	0.87	-2.06	-2.23



**Test Mode: Mode 4
Summary**

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11ac VHT80_Nss2,(MCS0)_3TX	6.19
802.11ax HEW80_Nss2,(MCS0)_3TX	6.58

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Test Mode: Mode 4

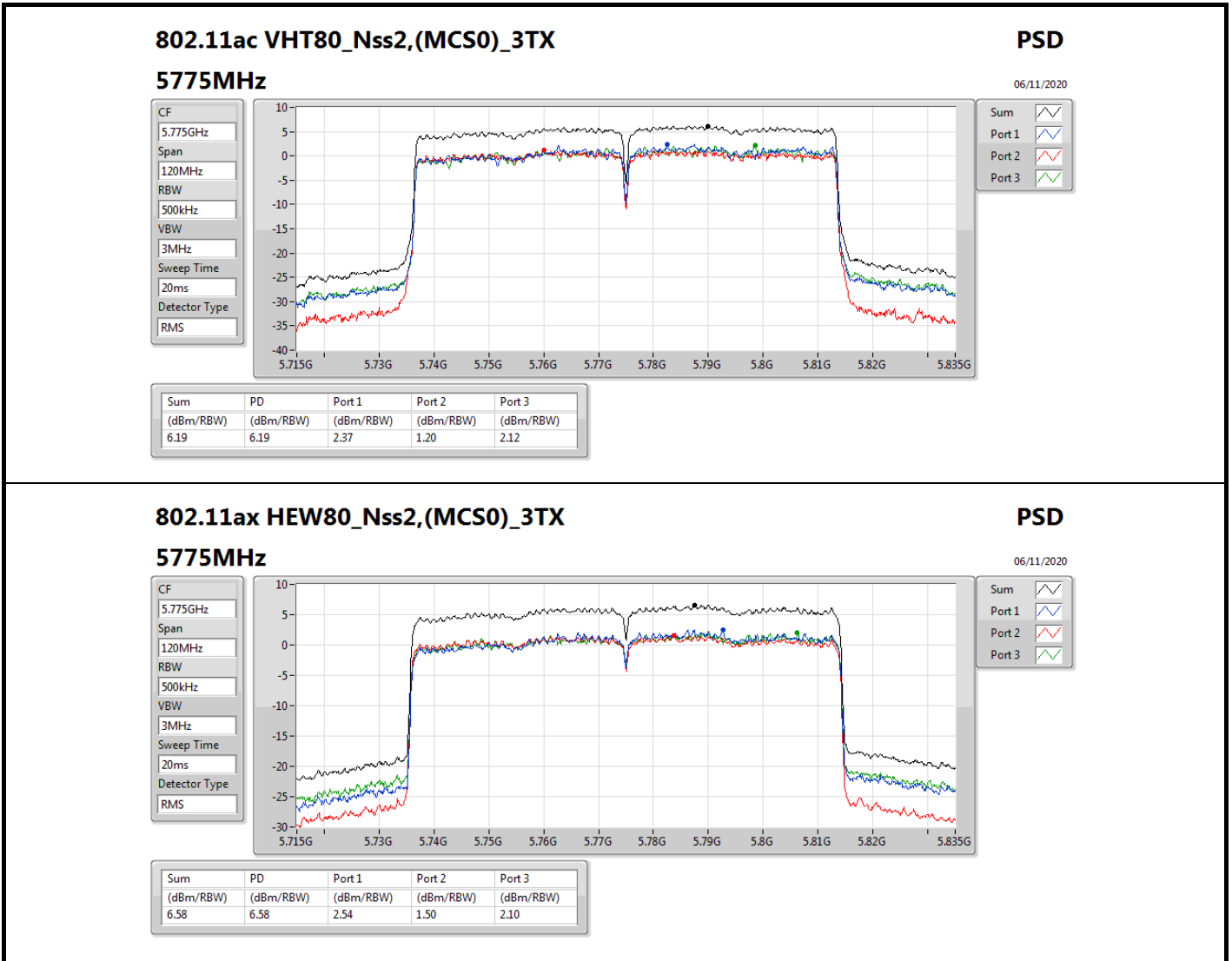
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	2.75	2.37	1.20	2.12	6.19	30.00
802.11ax HEW80_Nss2,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	2.75	2.54	1.50	2.10	6.58	30.00

DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

Test Mode: Mode 4





**Test Mode: Mode 5
Summary**

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11ac VHT80-BF_Nss2,(MCS0)_3TX	6.67
802.11ax HEW80-BF_Nss2,(MCS0)_3TX	6.53

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Test Mode: Mode 5

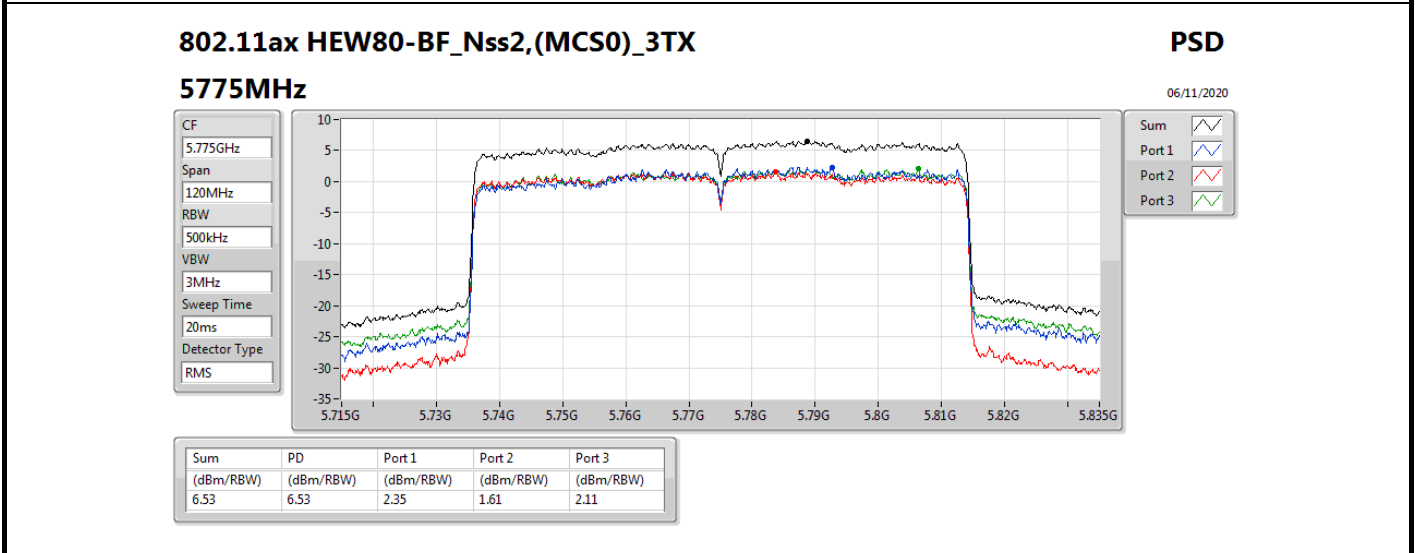
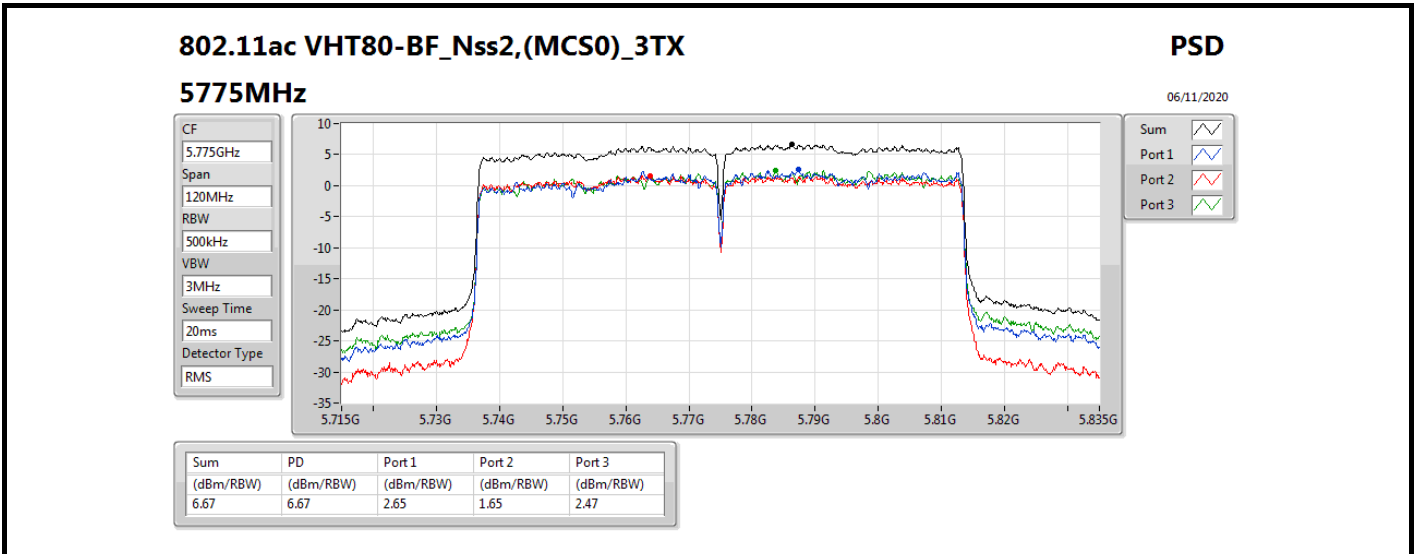
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT80-BF_Nss2,(MCS0)_3TX 5775MHz	- Pass	- 2.75	- 2.65	- 1.65	- 2.47	- 6.67	- 30.00
802.11ax HEW80-BF_Nss2,(MCS0)_3TX 5775MHz	- Pass	- 2.75	- 2.35	- 1.61	- 2.11	- 6.53	- 30.00

DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

Test Mode: Mode 5





**Test Mode: Mode 6
Summary**

Mode	PD (dBm/RBW)
5.725-5.85GHz	-
802.11ac VHT80_Nss3,(MCS0)_3TX	6.33
802.11ax HEW80_Nss3,(MCS0)_3TX	6.39

RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;



Test Mode: Mode 6

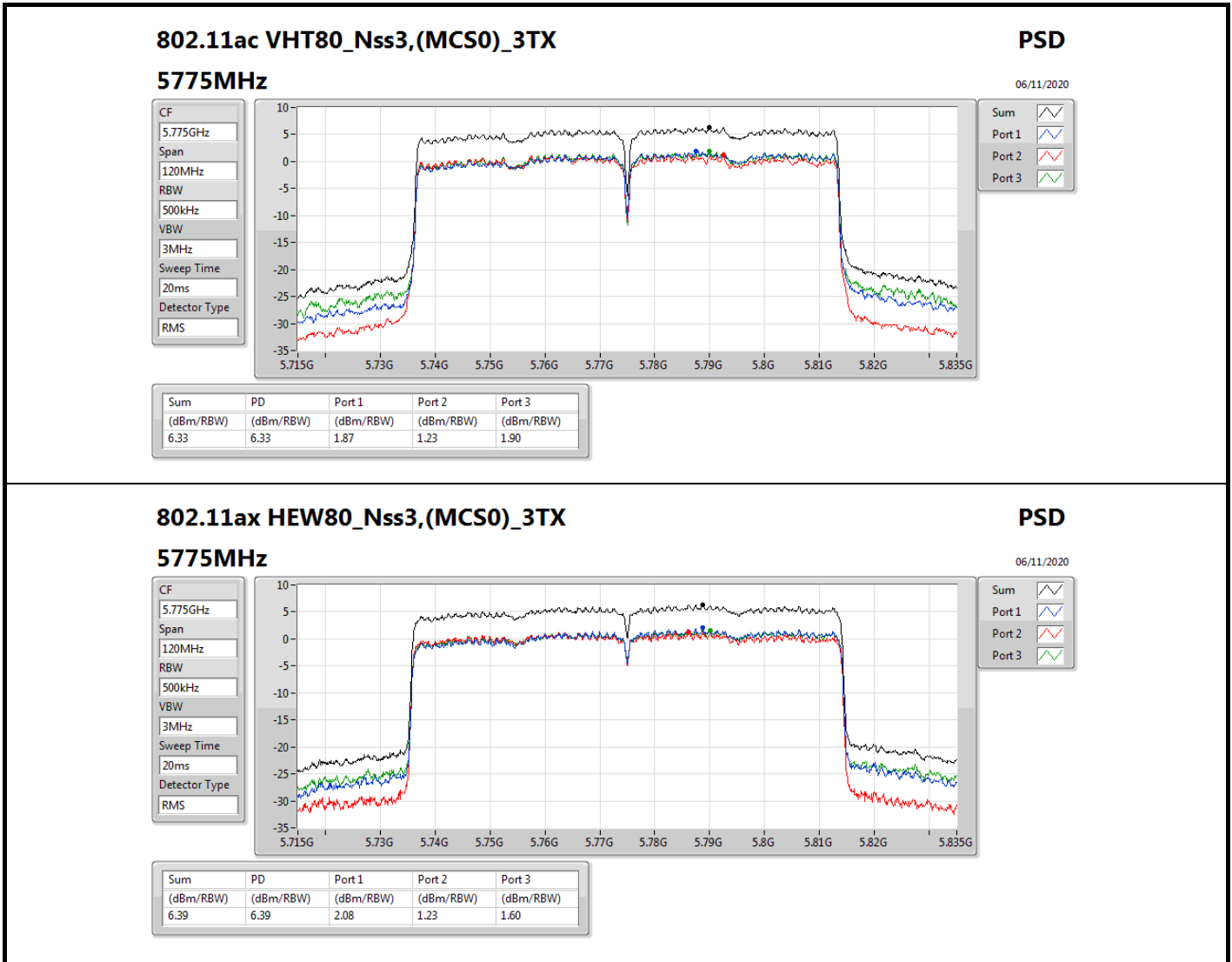
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ac VHT80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	1.87	1.23	1.90	6.33	30.00
802.11ax HEW80_Nss3,(MCS0)_3TX	-	-	-	-	-	-	-
5775MHz	Pass	0.99	2.08	1.23	1.60	6.39	30.00

DG = Directional Gain; RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;

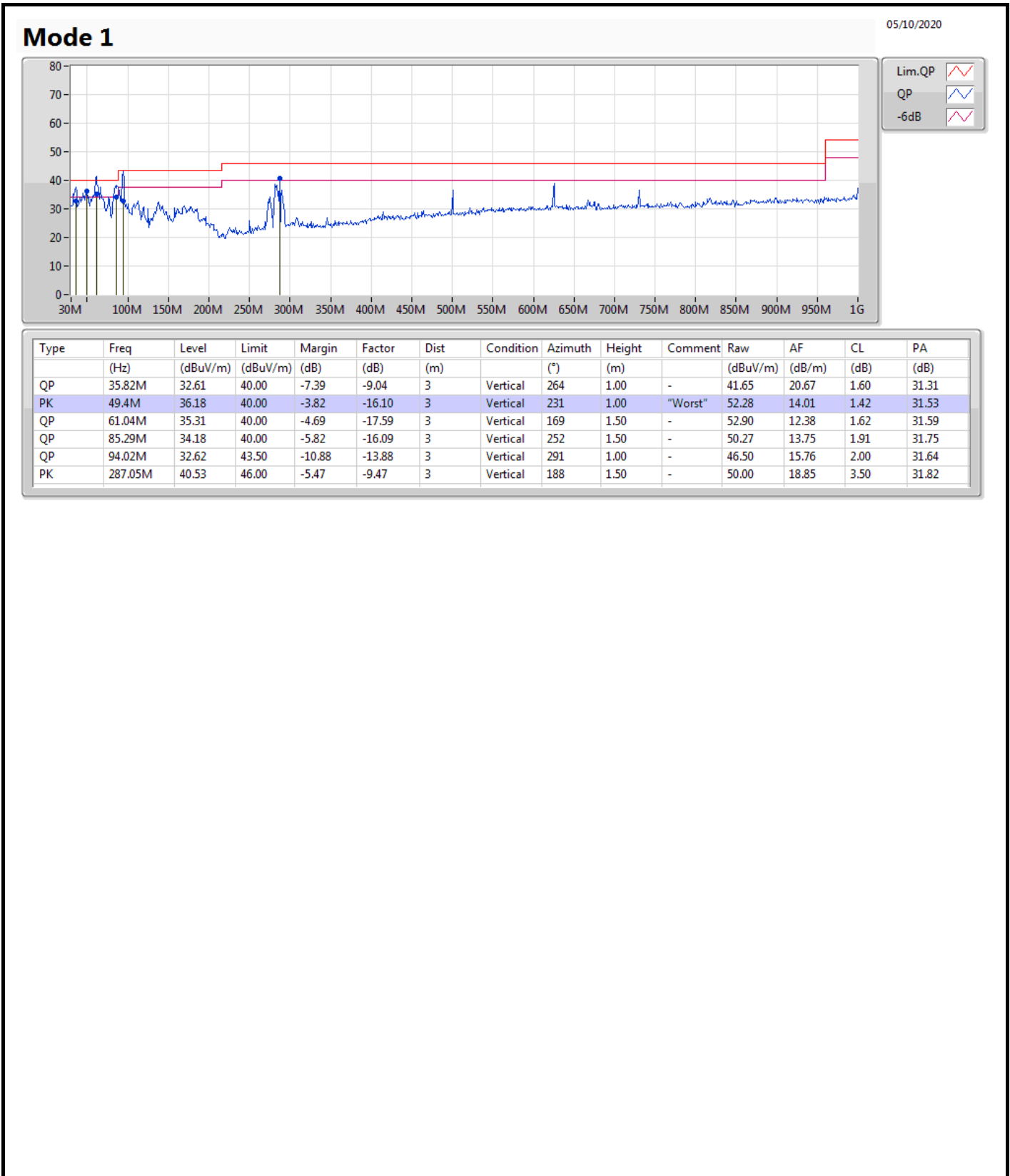
Test Mode: Mode 6

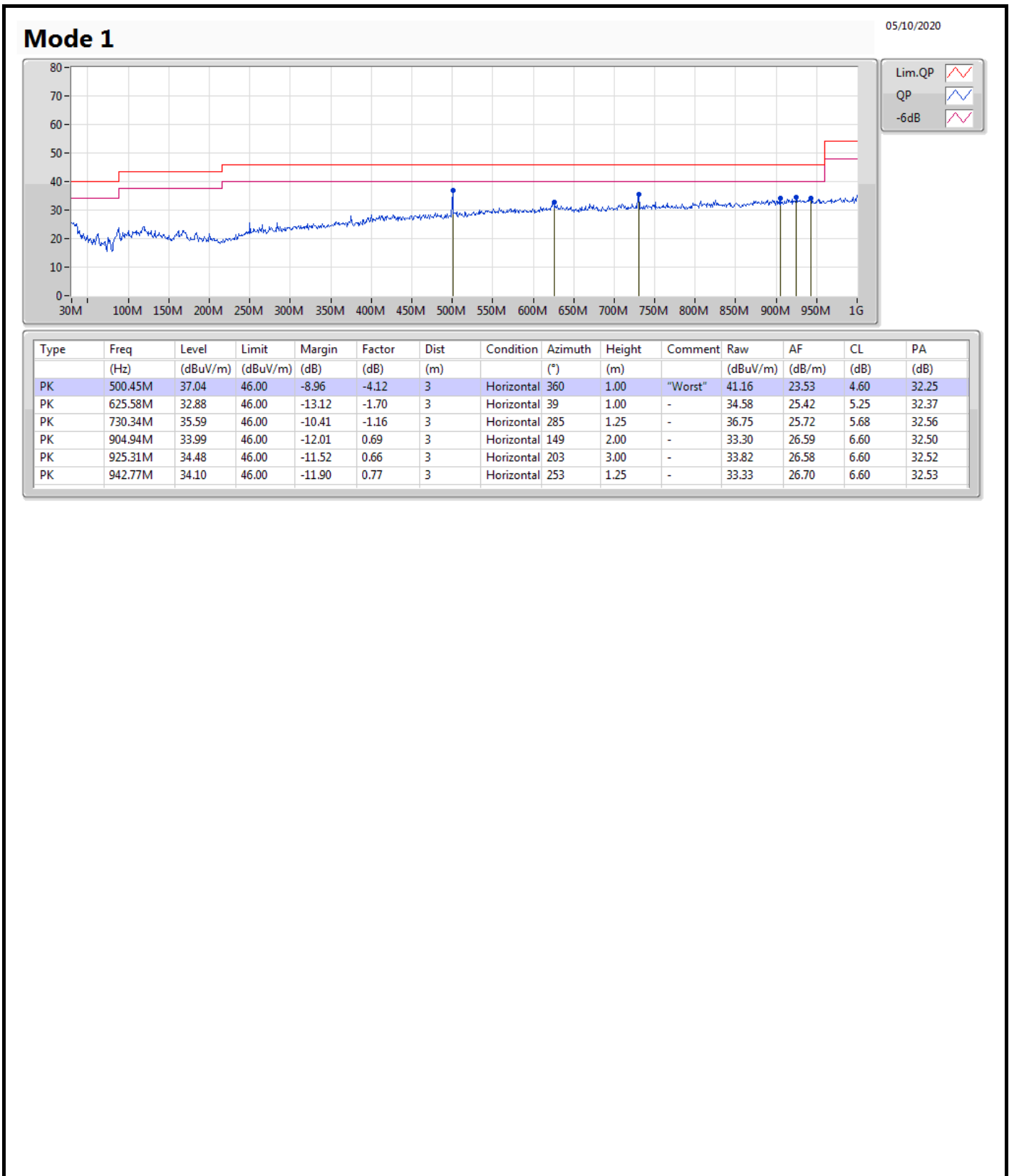




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	49.4M	36.18	40.00	-3.82	Vertical





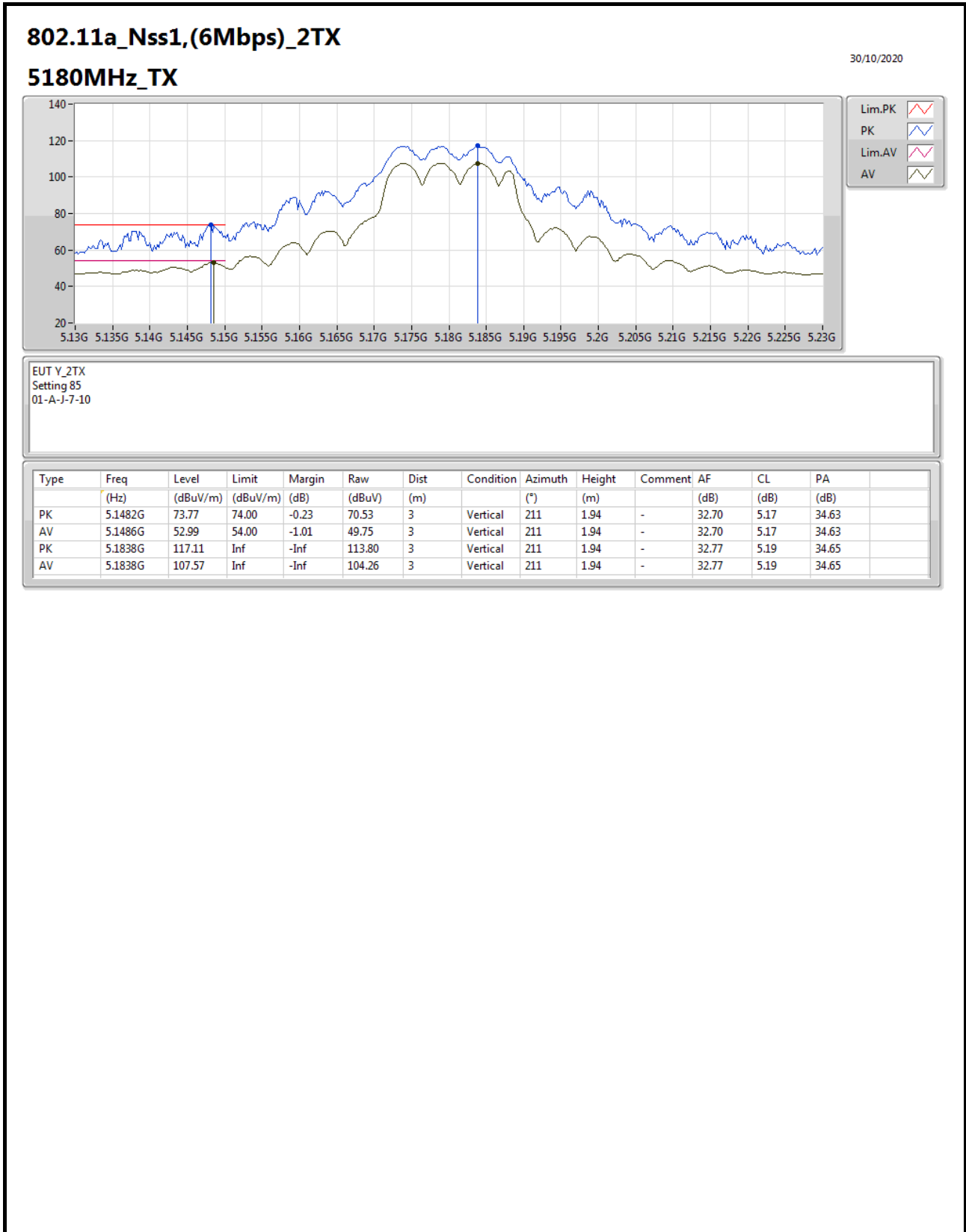


Test Mode: Mode 1
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.725-5.85GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_3TX	Pass	PK	5.927G	68.13	68.20	-0.07	3	Vertical	96	1.00	-

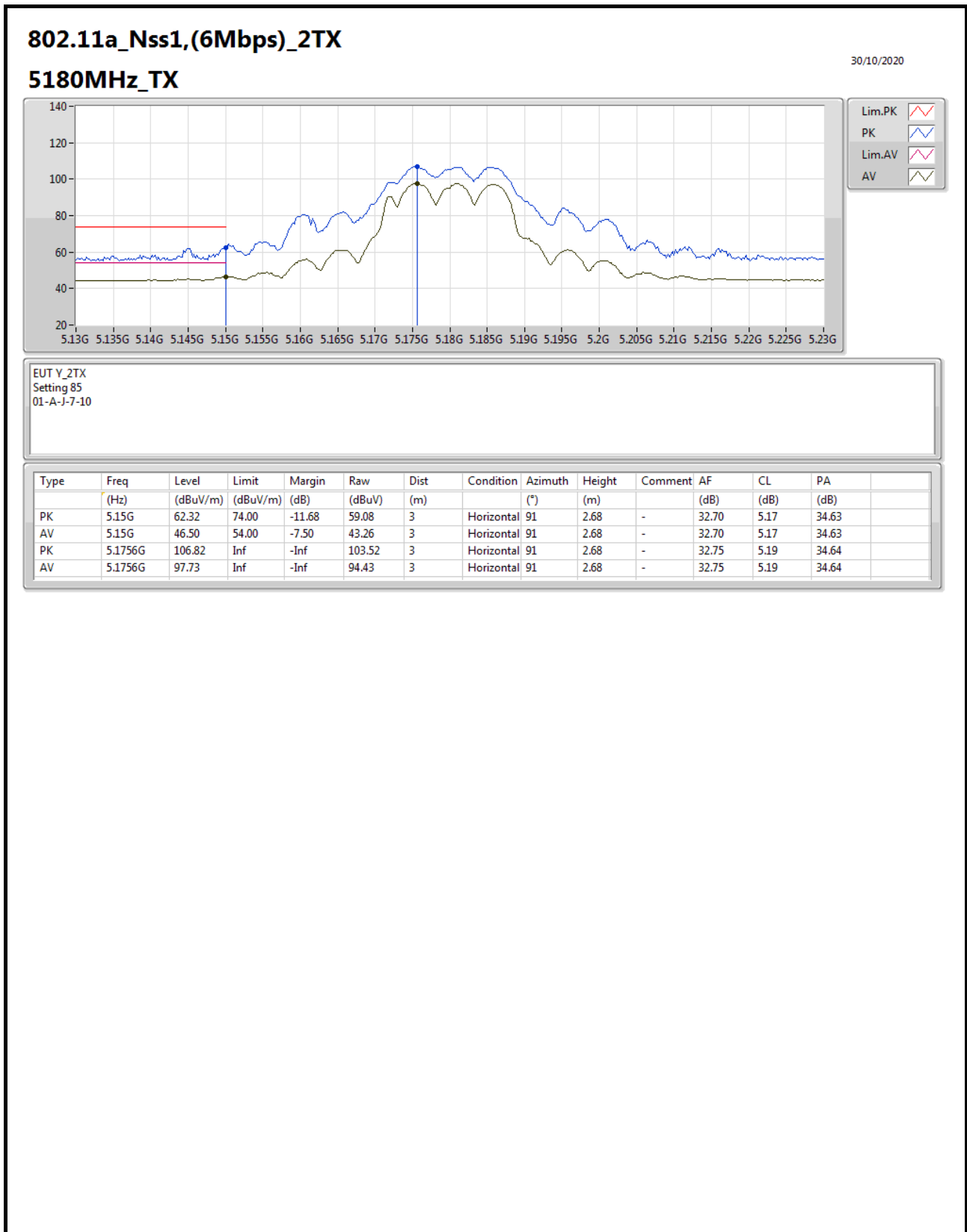


Test Mode: Mode 1



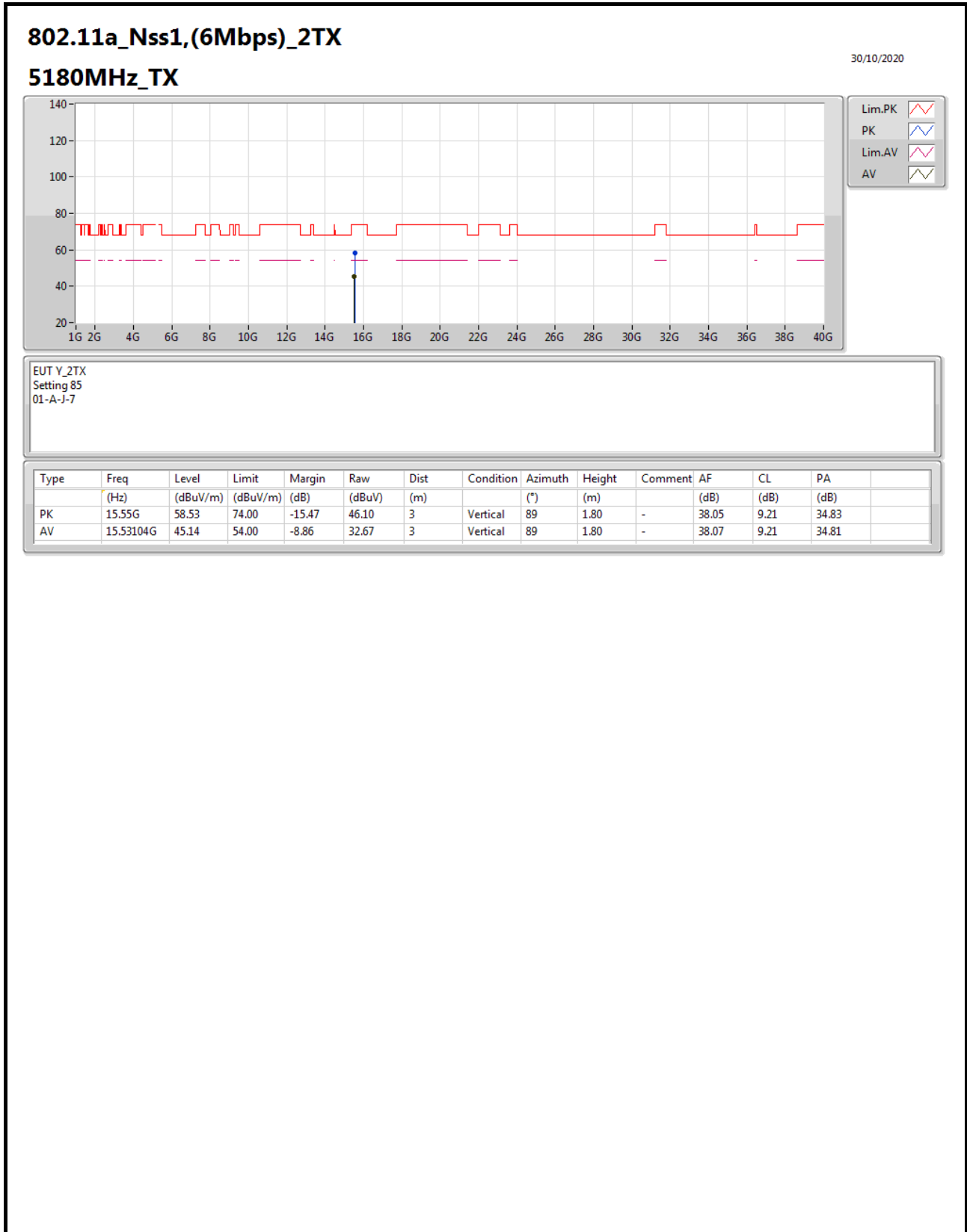


Test Mode: Mode 1



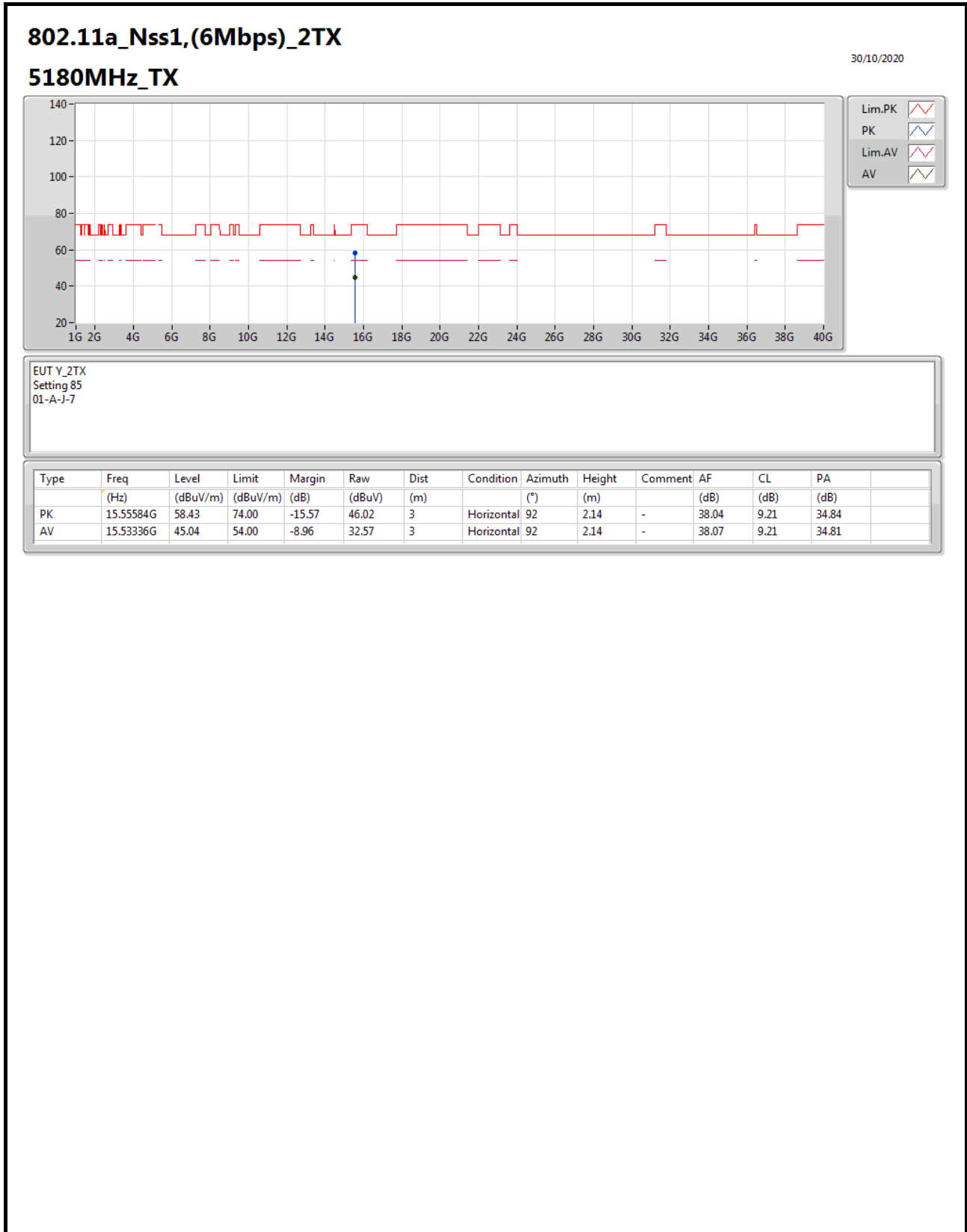


Test Mode: Mode 1



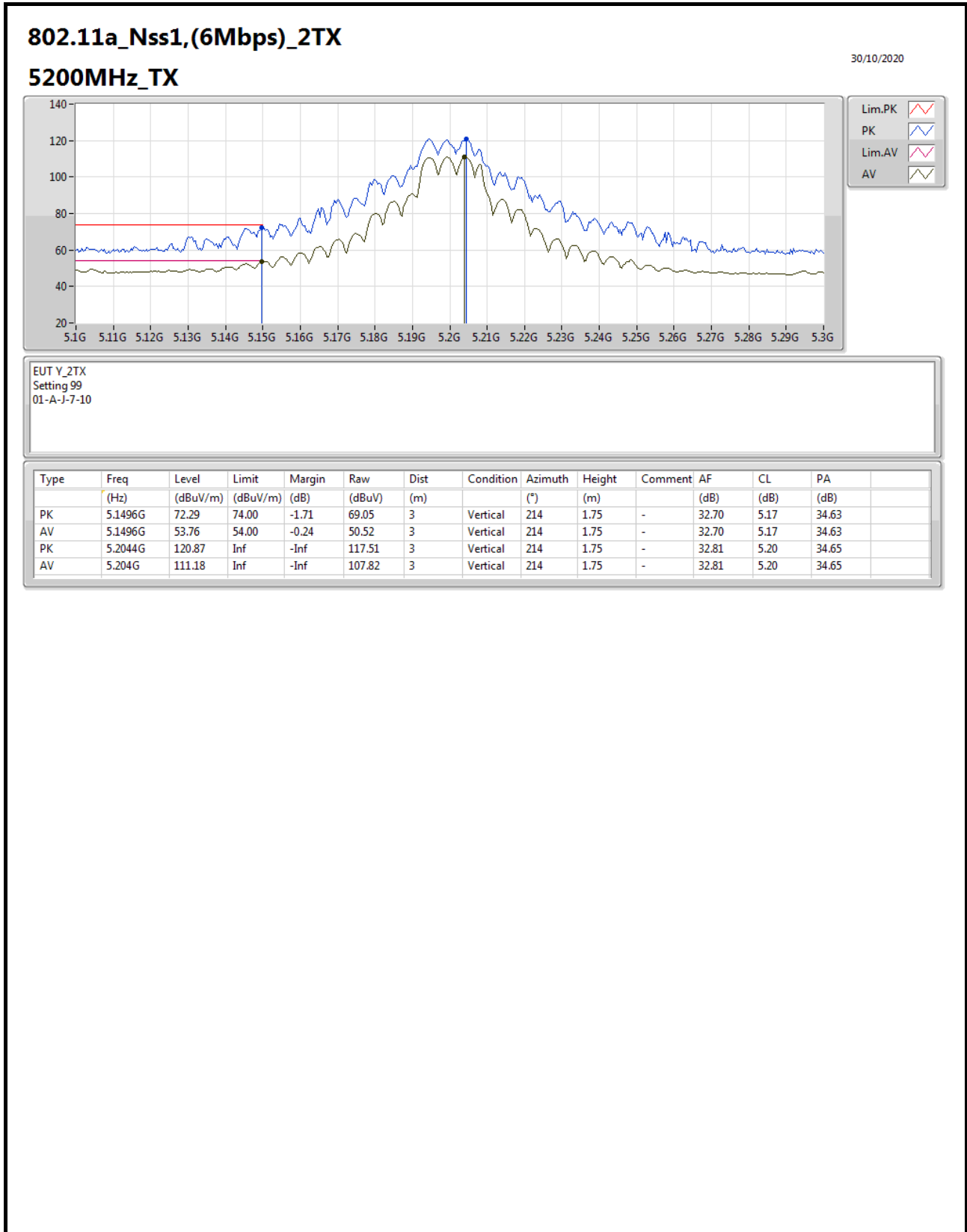


Test Mode: Mode 1





Test Mode: Mode 1



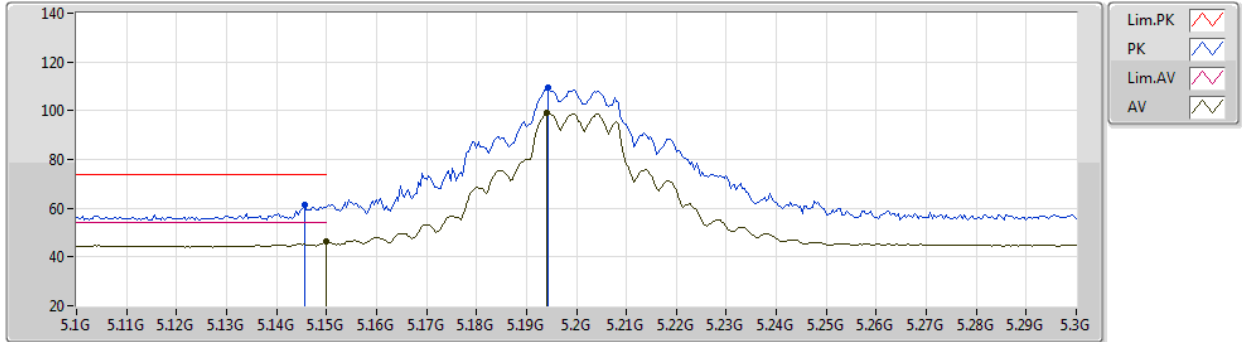


Test Mode: Mode 1

802.11a_Nss1,(6Mbps)_2TX

30/10/2020

5200MHz_TX

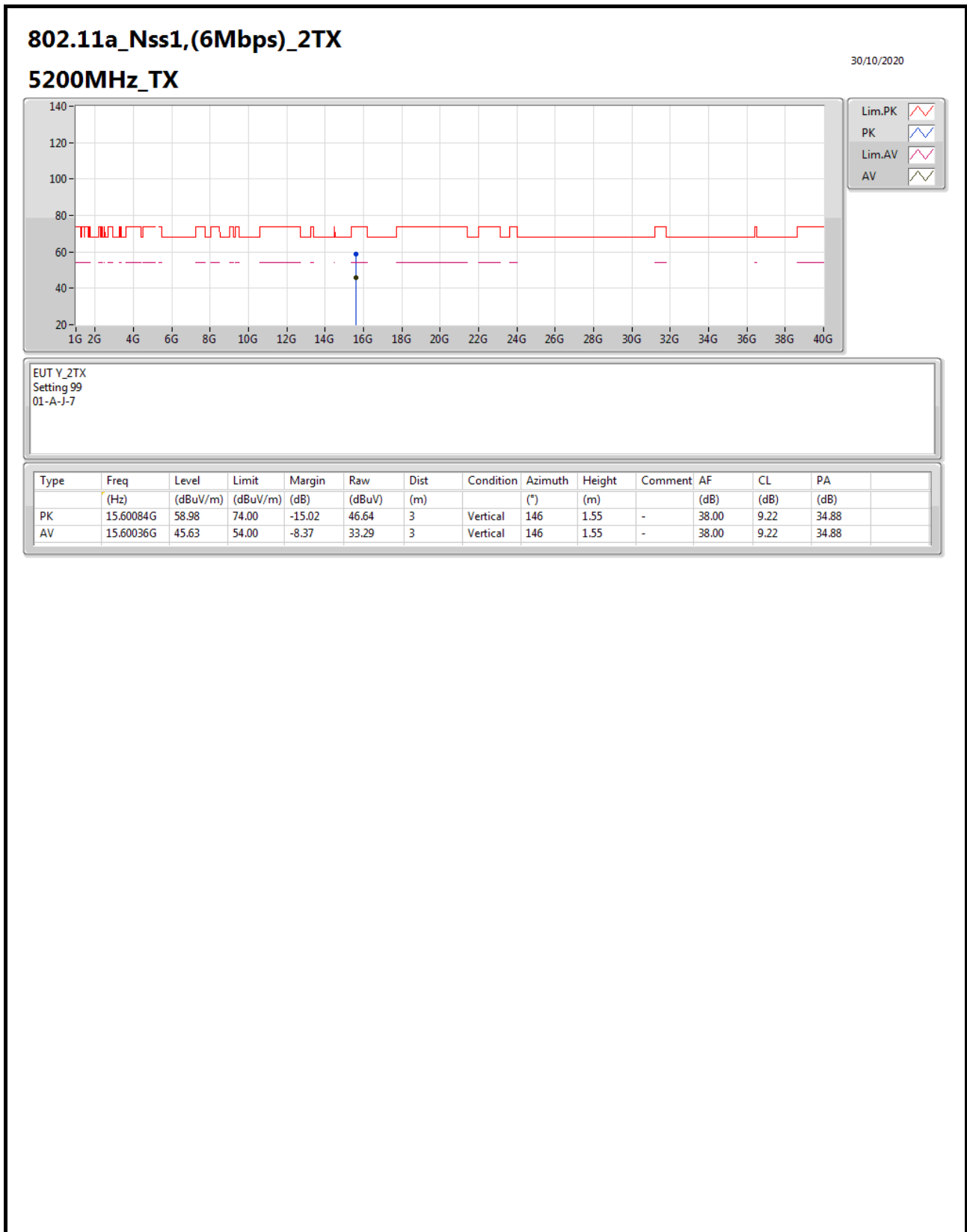


EUT Y_2TX
Setting 99
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1456G	61.29	74.00	-12.71	58.04	3	Horizontal	145	1.77	-	32.71	5.17	34.63
AV	5.15G	46.17	54.00	-7.83	42.93	3	Horizontal	145	1.77	-	32.70	5.17	34.63
PK	5.1944G	109.24	Inf	-Inf	105.90	3	Horizontal	145	1.77	-	32.79	5.20	34.65
AV	5.194G	98.88	Inf	-Inf	95.54	3	Horizontal	145	1.77	-	32.79	5.20	34.65

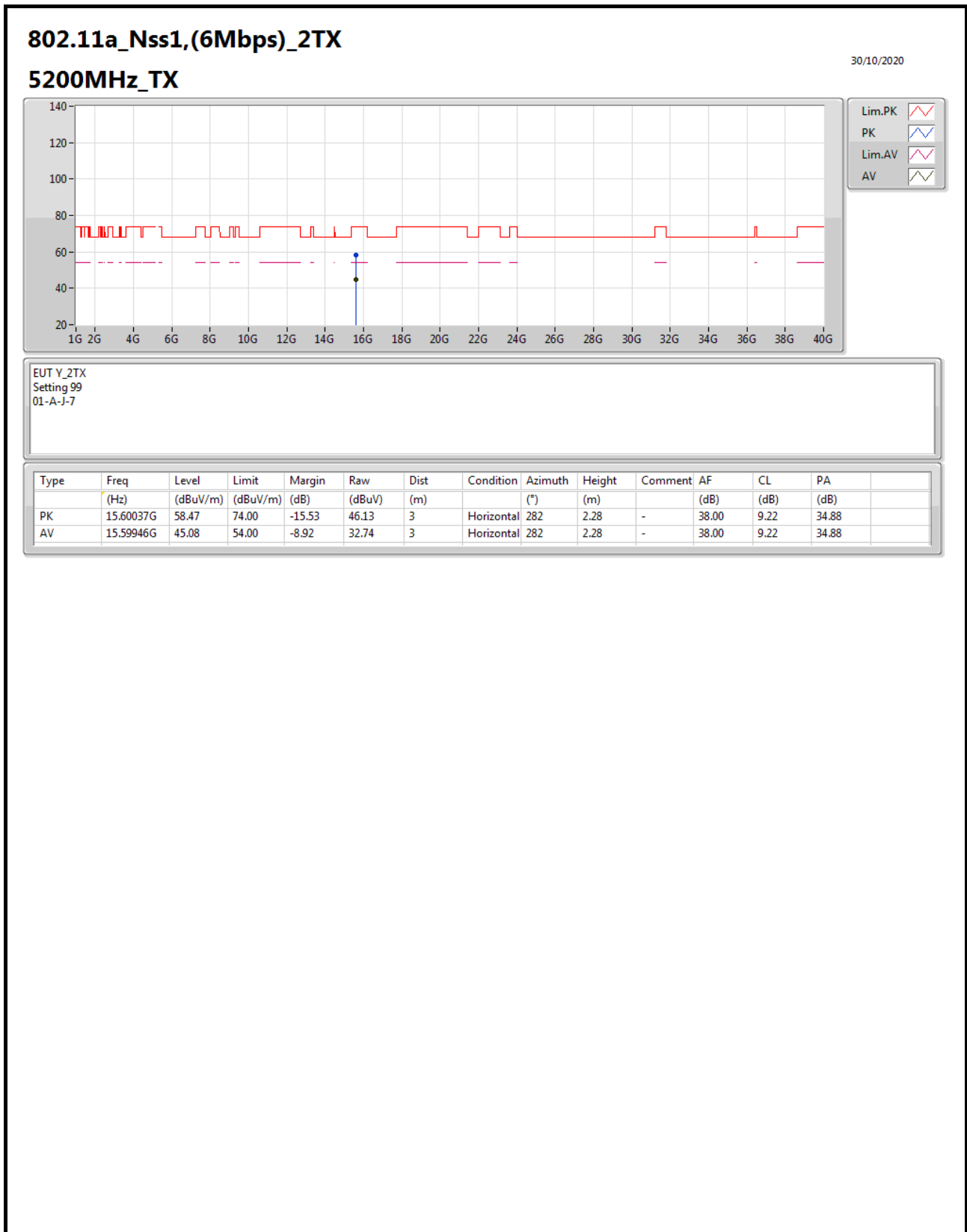


Test Mode: Mode 1





Test Mode: Mode 1



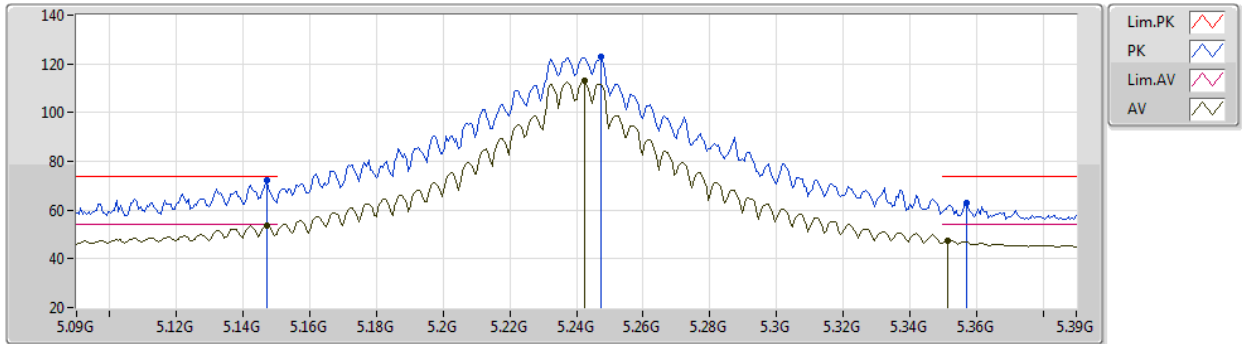


Test Mode: Mode 1

802.11a_Nss1,(6Mbps)_2TX

30/10/2020

5240MHz_TX



EUT_Y_2TX
Setting 106
01-A-J-7-10

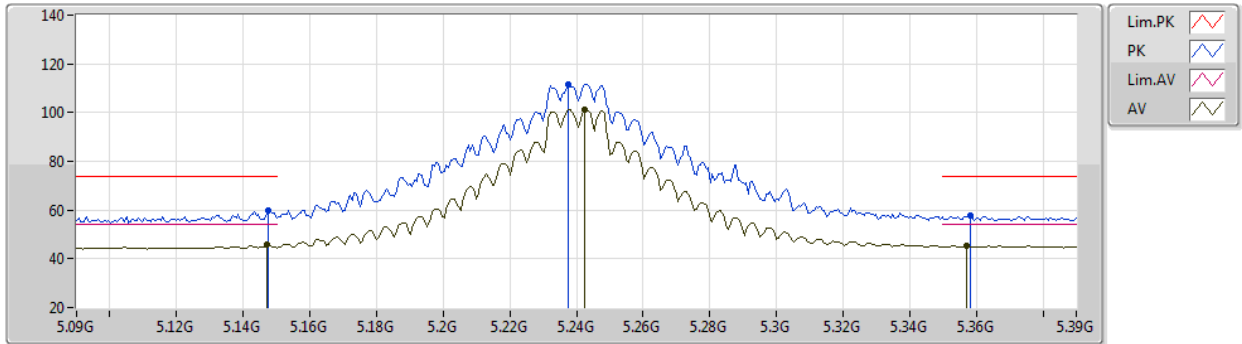
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.147G	72.17	74.00	-1.83	68.92	3	Vertical	197	1.64	-	32.71	5.17	34.63
AV	5.147G	53.79	54.00	-0.21	50.54	3	Vertical	197	1.64	-	32.71	5.17	34.63
PK	5.242G	123.06	Inf	-Inf	119.59	3	Vertical	197	1.64	-	32.89	5.25	34.67
AV	5.242G	112.85	Inf	-Inf	109.40	3	Vertical	197	1.64	-	32.88	5.24	34.67
PK	5.357G	63.11	74.00	-10.89	59.35	3	Vertical	197	1.64	-	33.11	5.36	34.71
AV	5.3516G	47.64	54.00	-6.36	43.90	3	Vertical	197	1.64	-	33.10	5.35	34.71

Test Mode: Mode 1

802.11a_Nss1,(6Mbps)_2TX

30/10/2020

5240MHz_TX

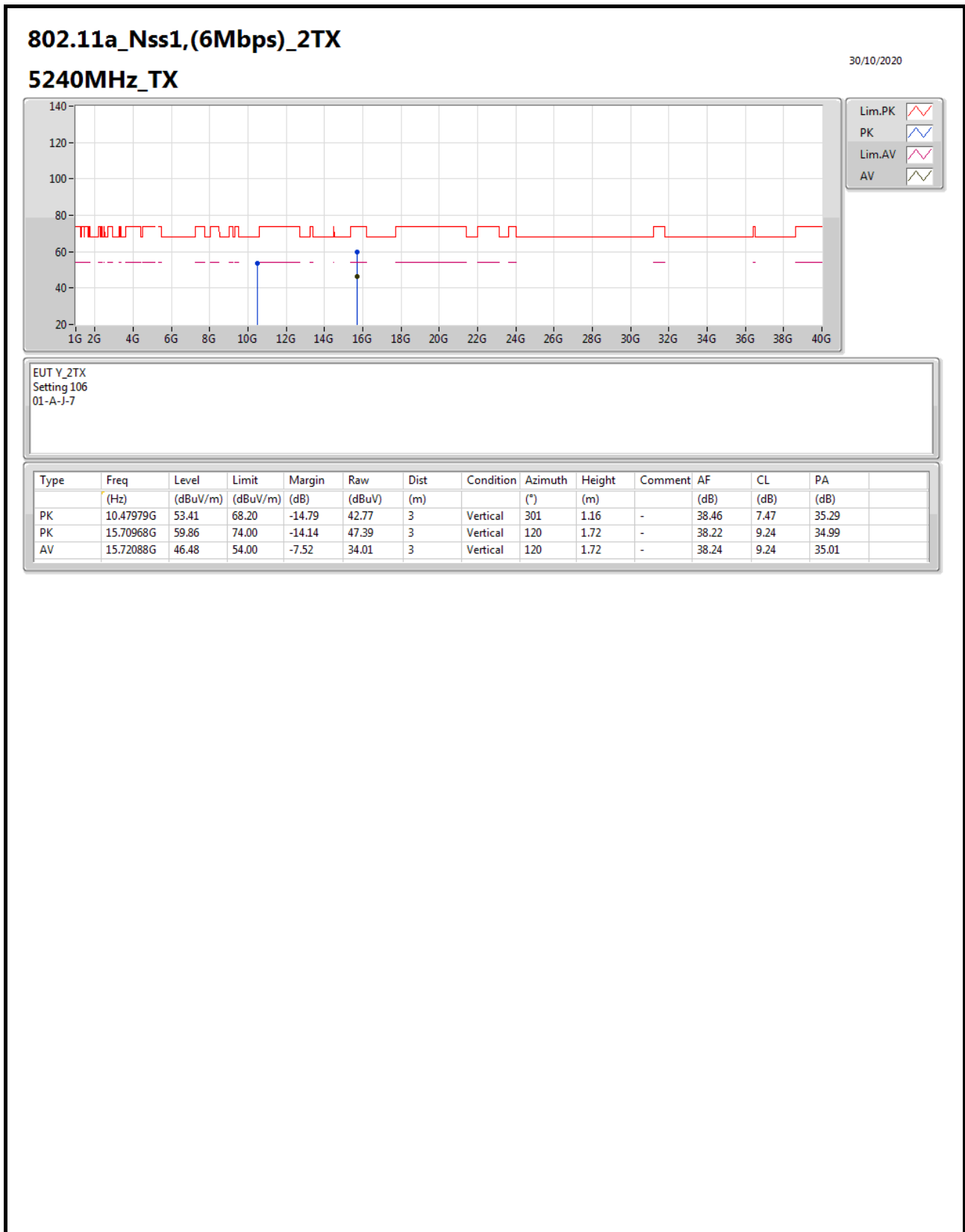


EUT_Y_2TX
Setting 106
01-A-J-7-10

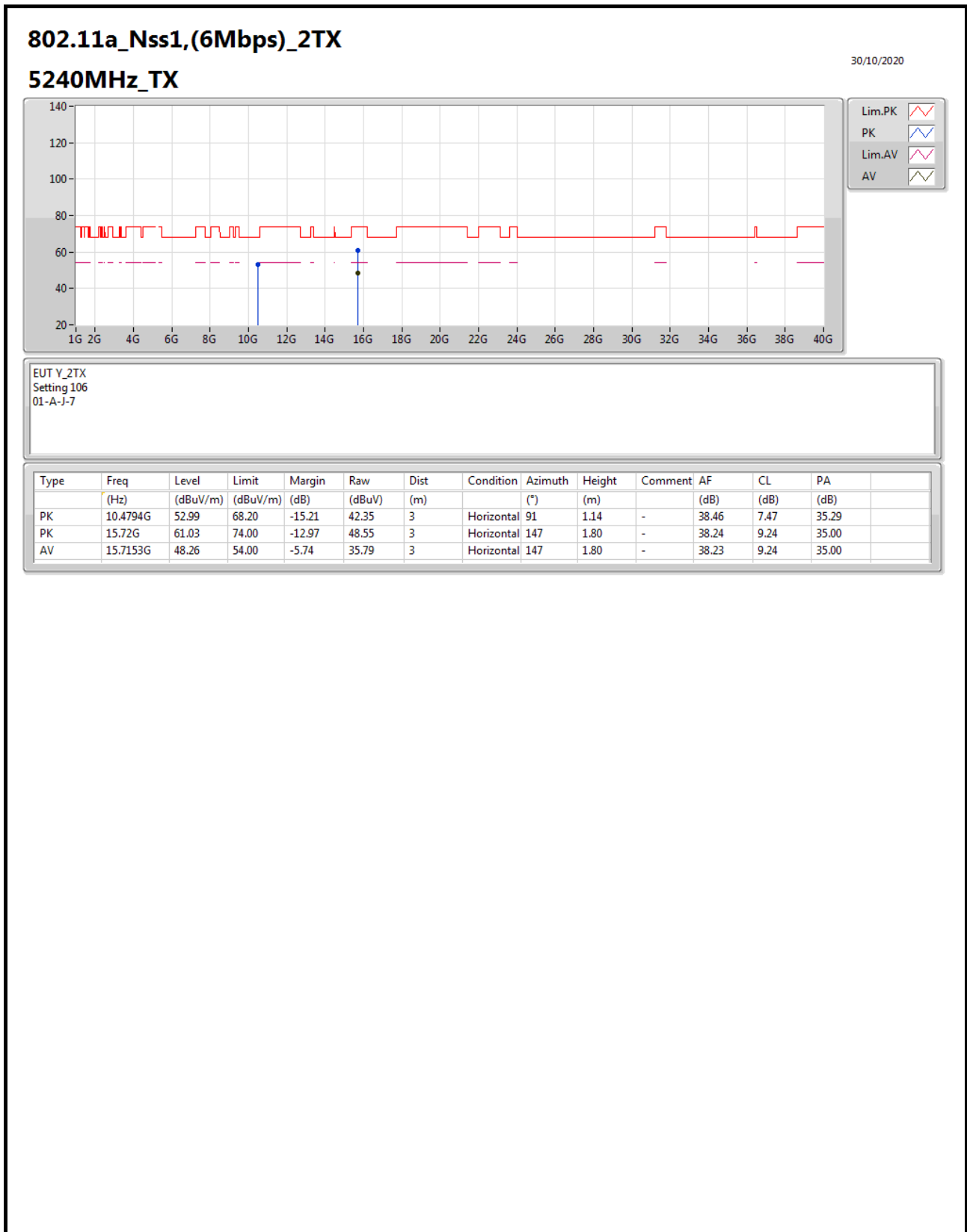
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1476G	59.57	74.00	-14.43	56.33	3	Horizontal	65	2.01	-	32.70	5.17	34.63
AV	5.147G	45.67	54.00	-8.33	42.42	3	Horizontal	65	2.01	-	32.71	5.17	34.63
PK	5.2376G	111.76	Inf	-Inf	108.31	3	Horizontal	65	2.01	-	32.88	5.24	34.67
AV	5.2424G	101.41	Inf	-Inf	97.96	3	Horizontal	65	2.01	-	32.88	5.24	34.67
PK	5.3582G	57.53	74.00	-16.47	53.76	3	Horizontal	65	2.01	-	33.12	5.36	34.71
AV	5.357G	45.17	54.00	-8.83	41.41	3	Horizontal	65	2.01	-	33.11	5.36	34.71



Test Mode: Mode 1

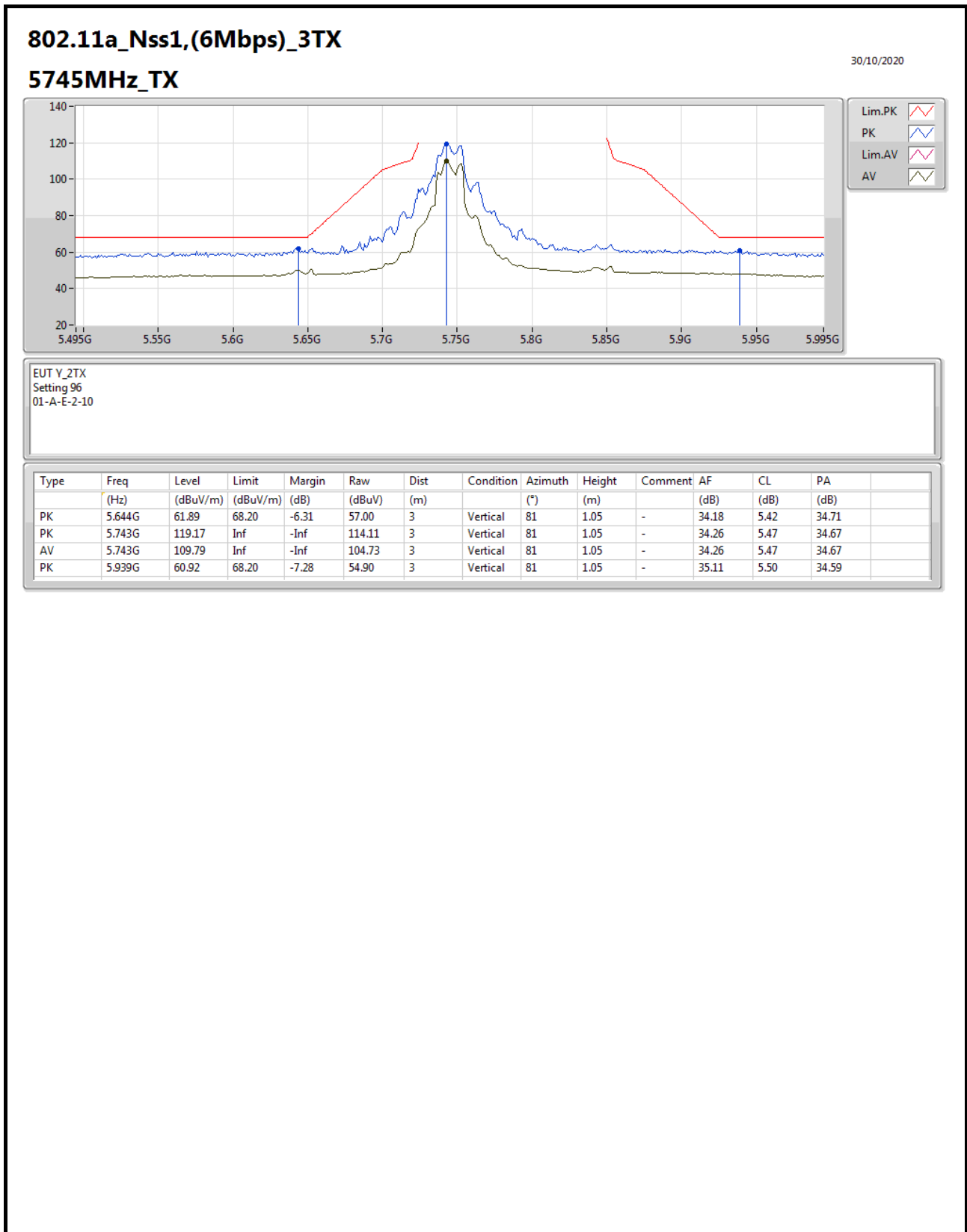


Test Mode: Mode 1



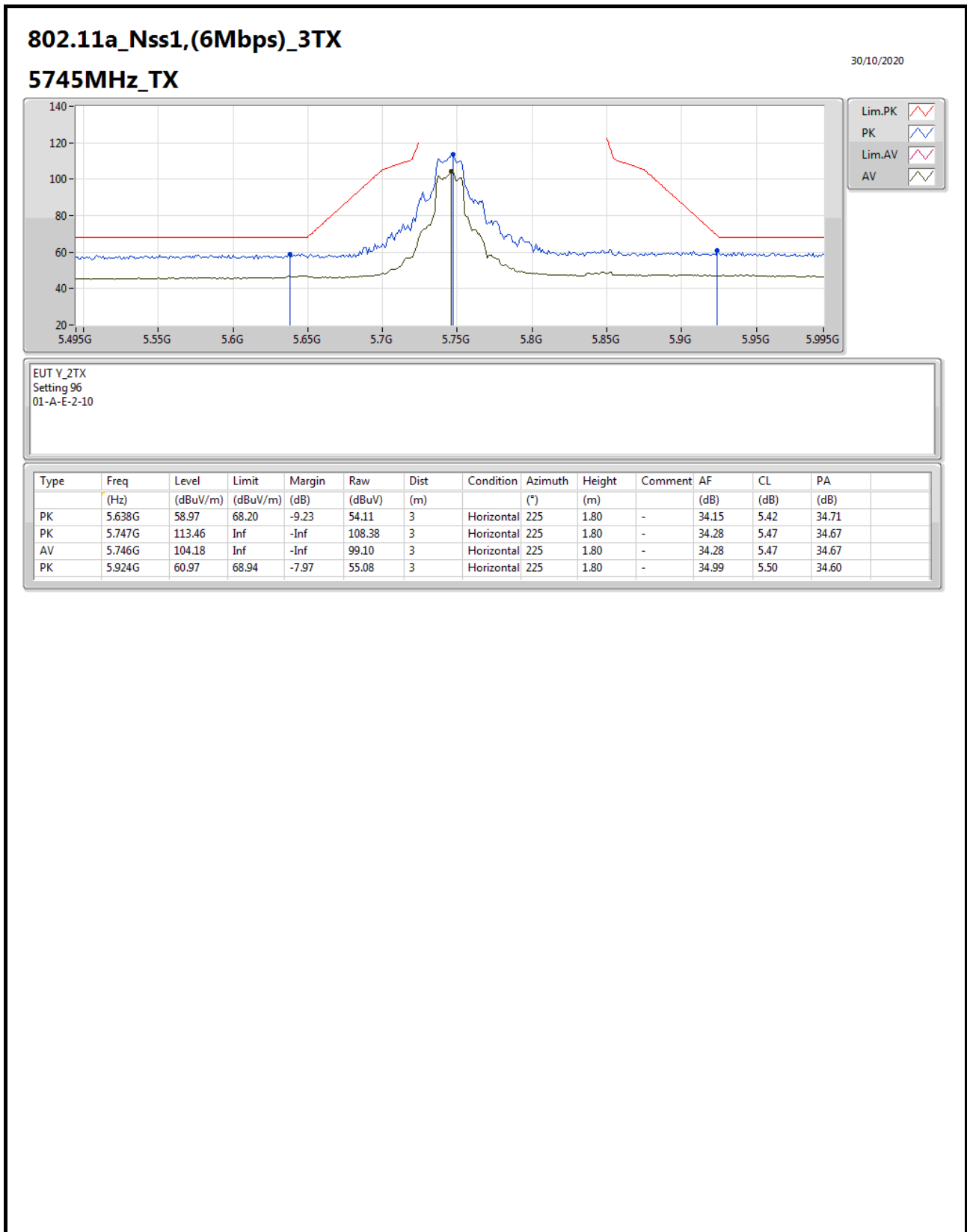


Test Mode: Mode 1



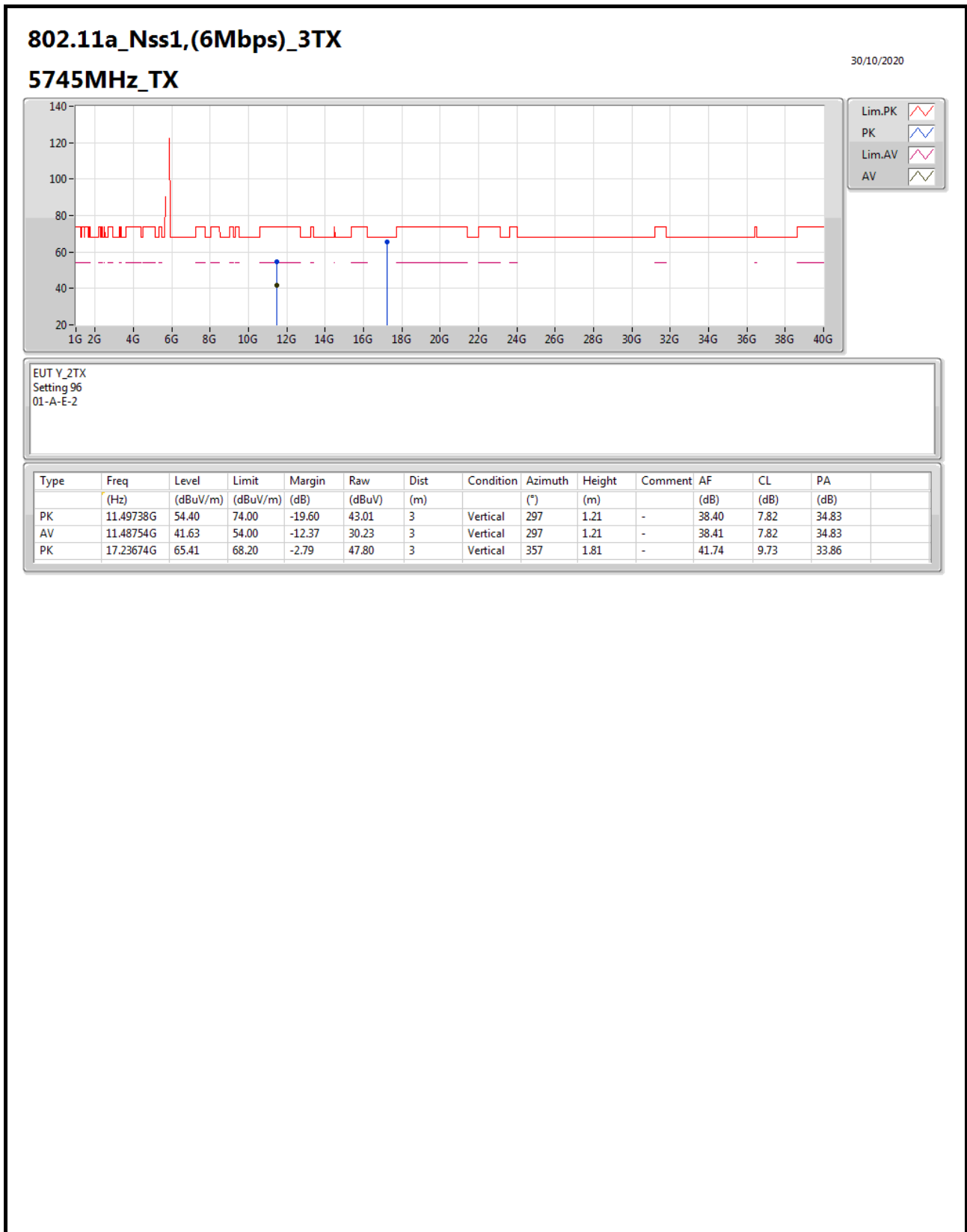


Test Mode: Mode 1



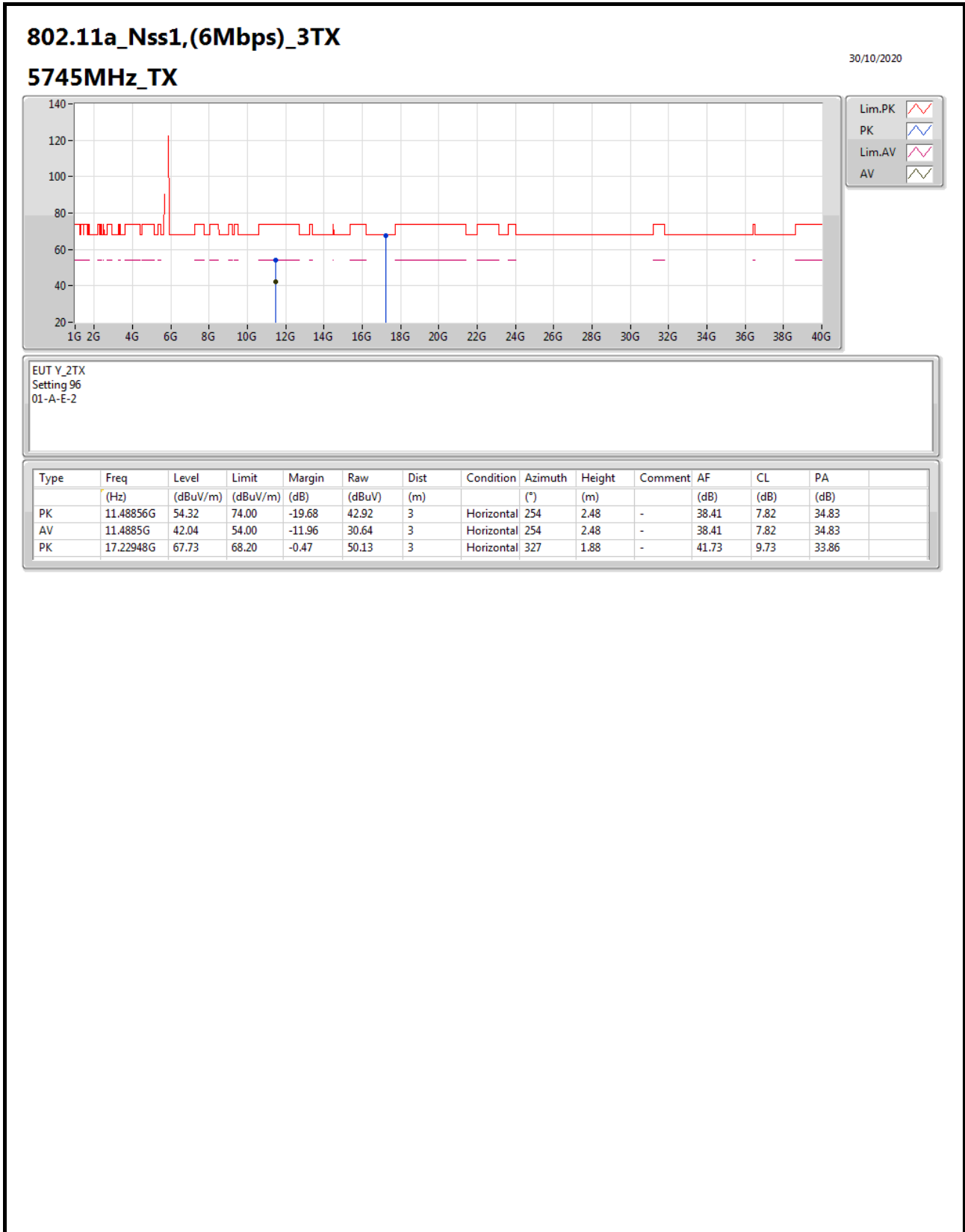


Test Mode: Mode 1



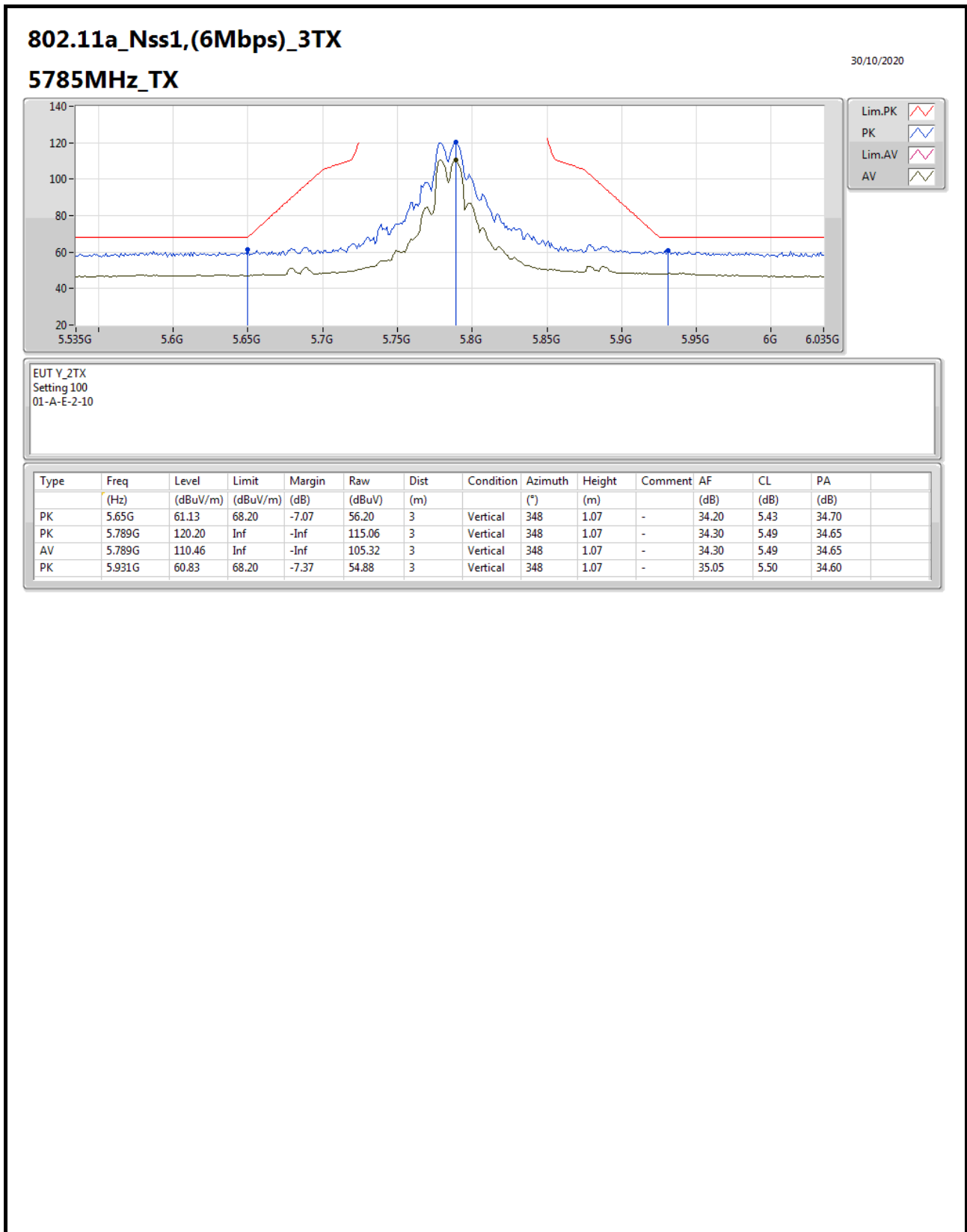


Test Mode: Mode 1



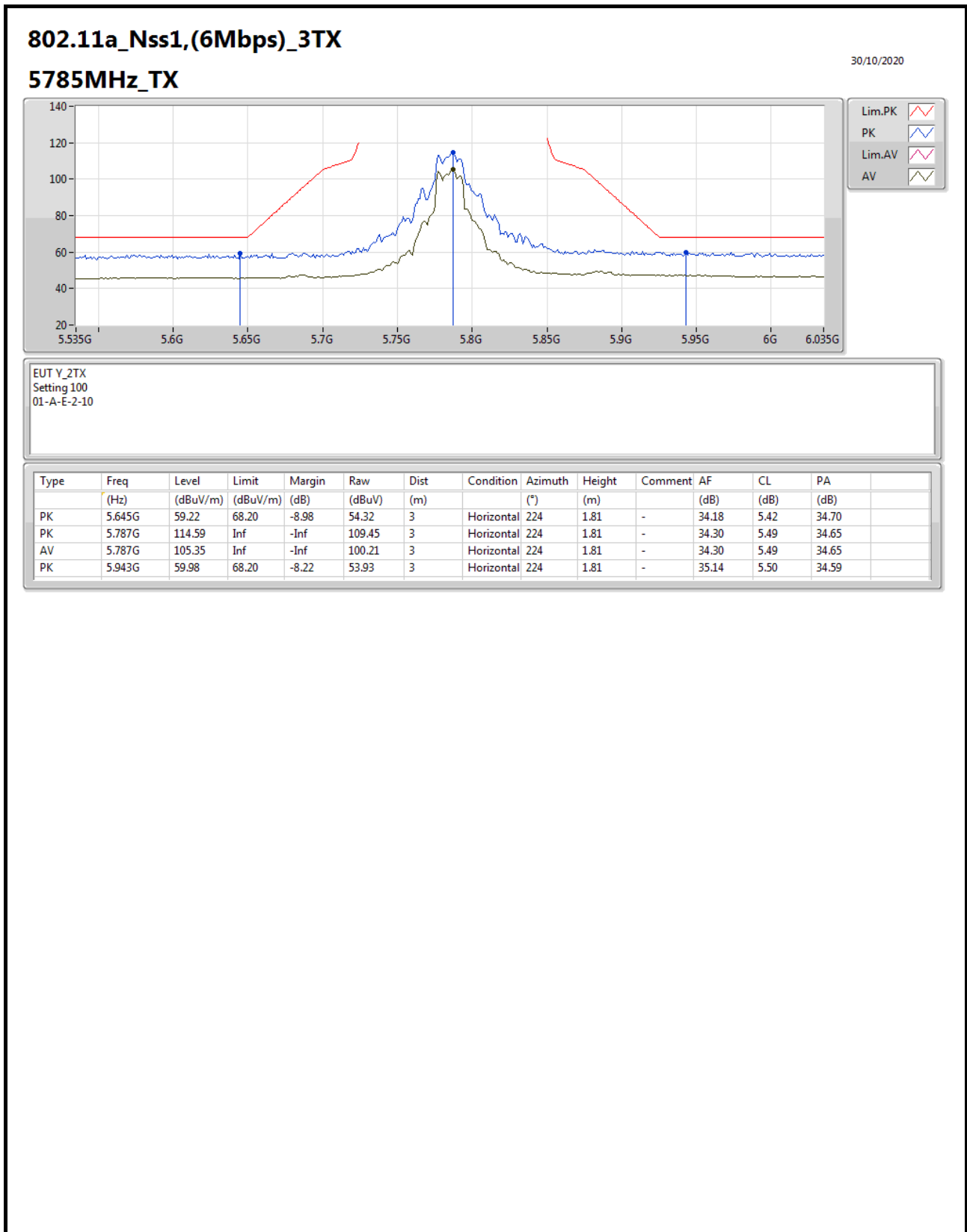


Test Mode: Mode 1



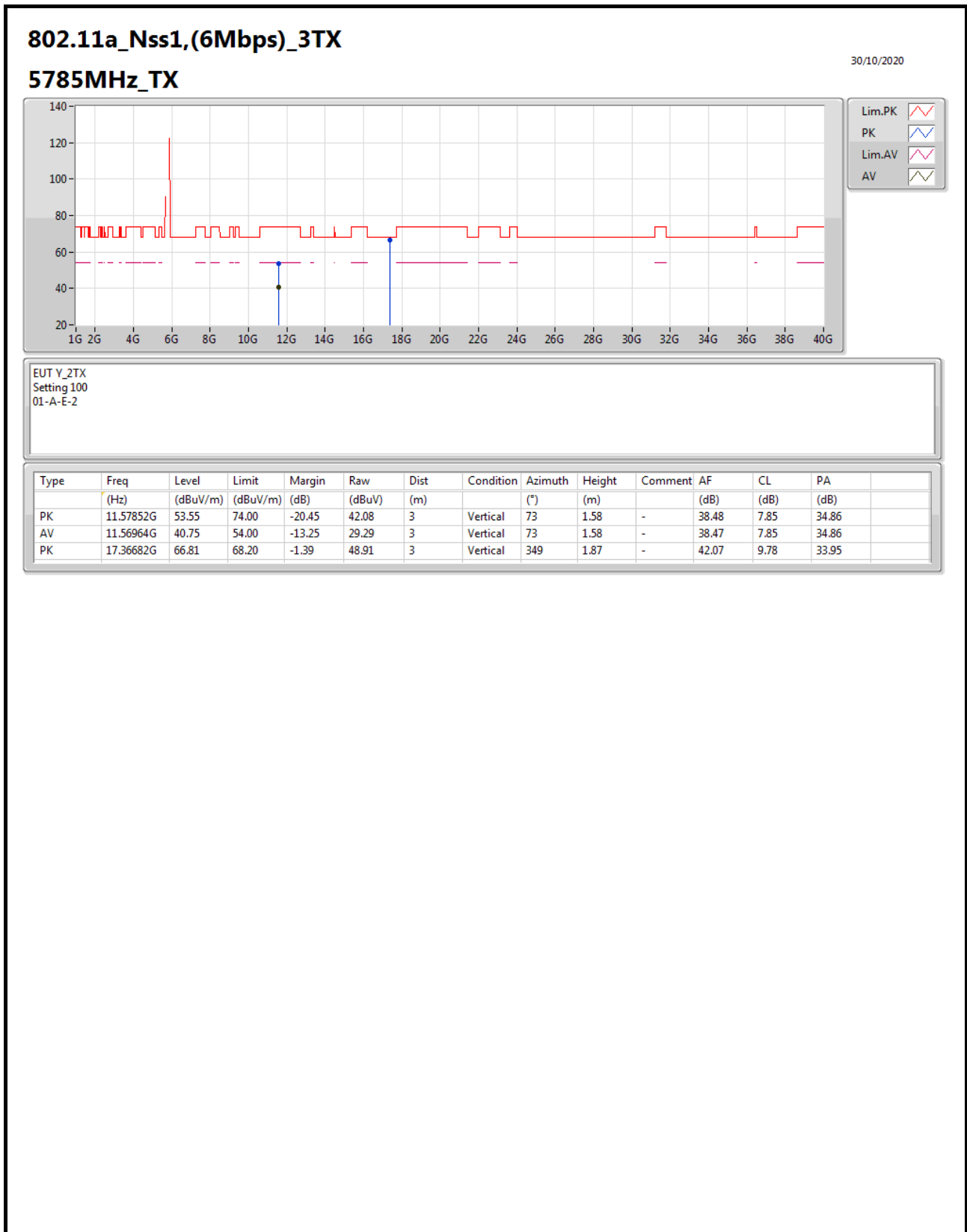


Test Mode: Mode 1



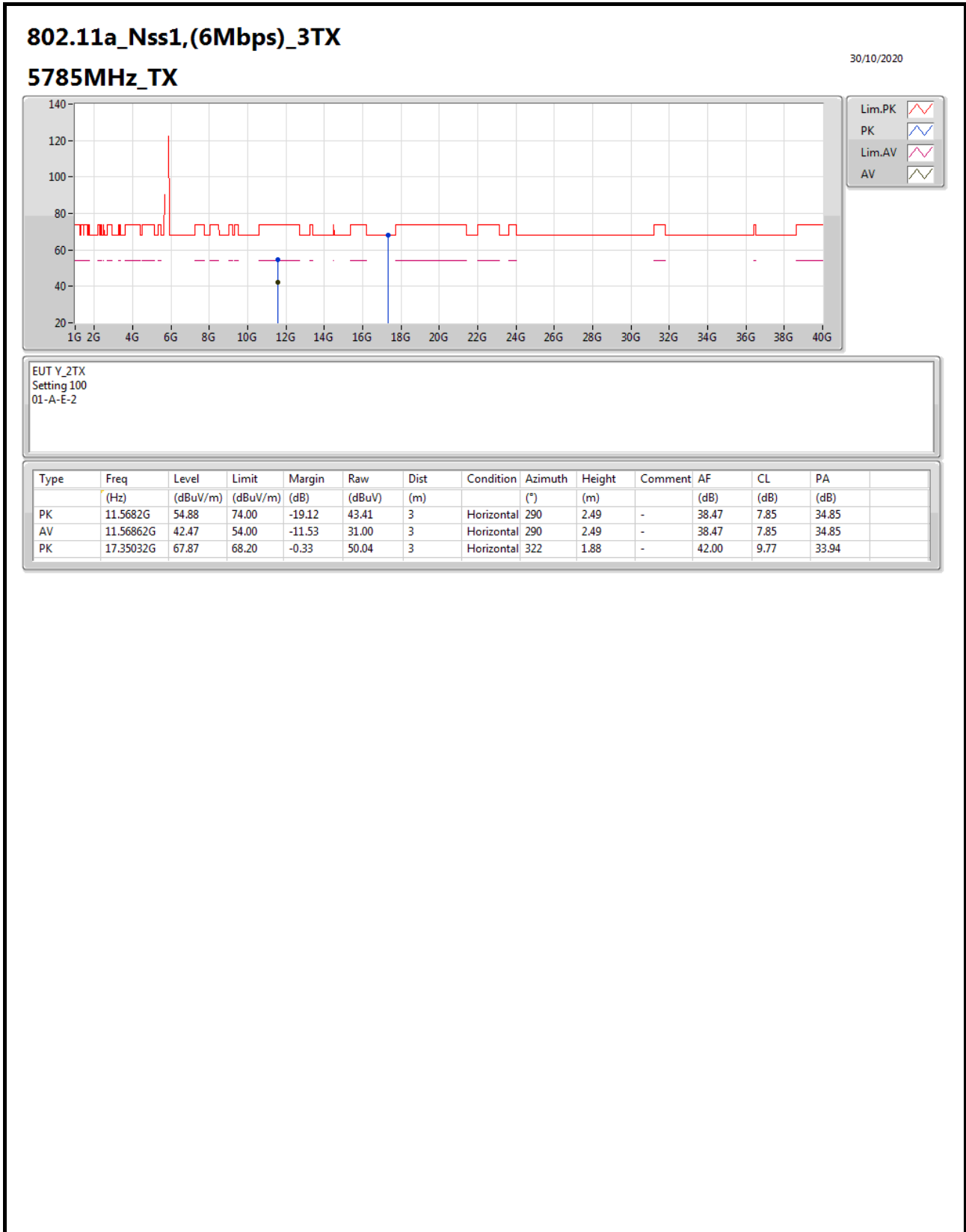


Test Mode: Mode 1



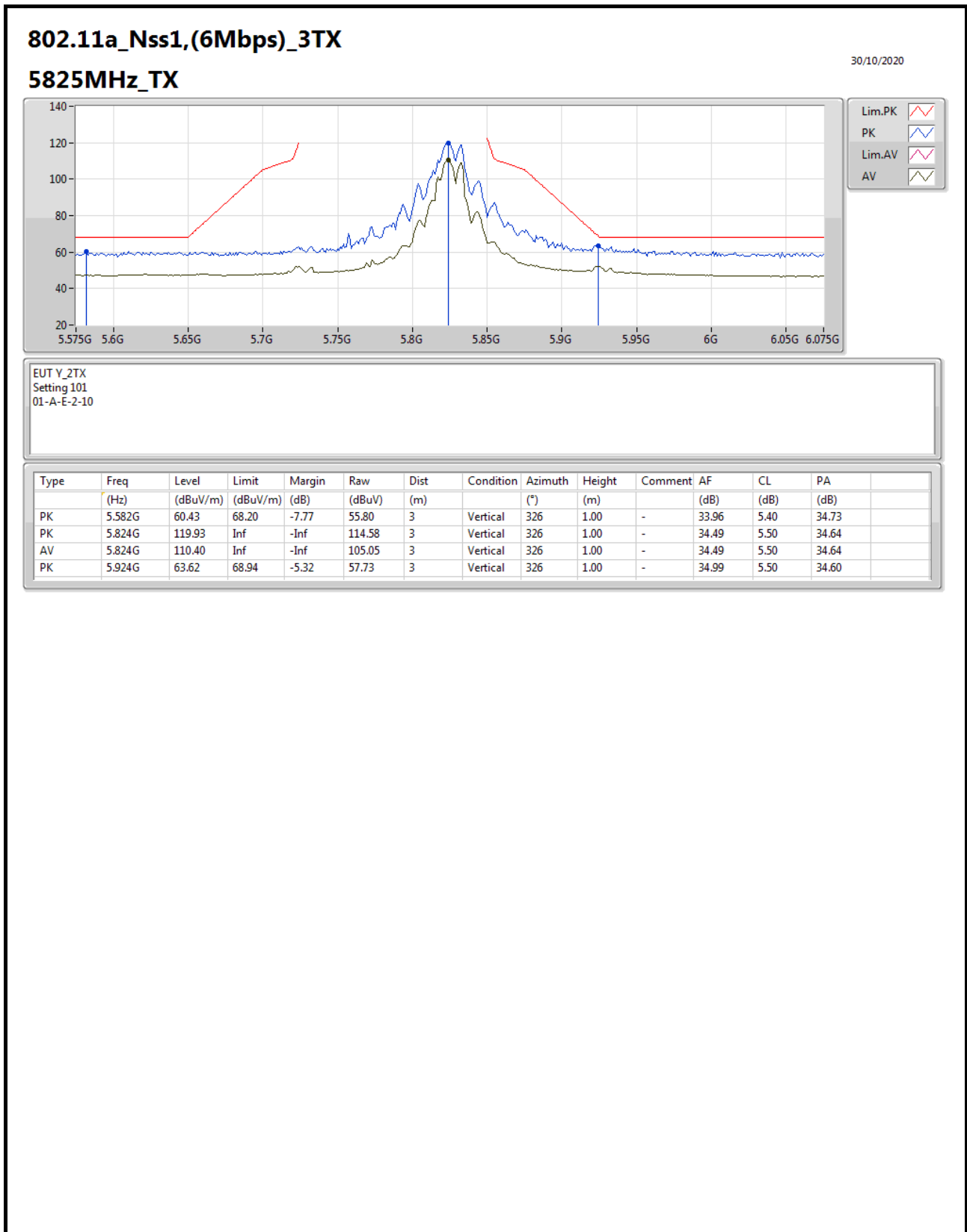


Test Mode: Mode 1



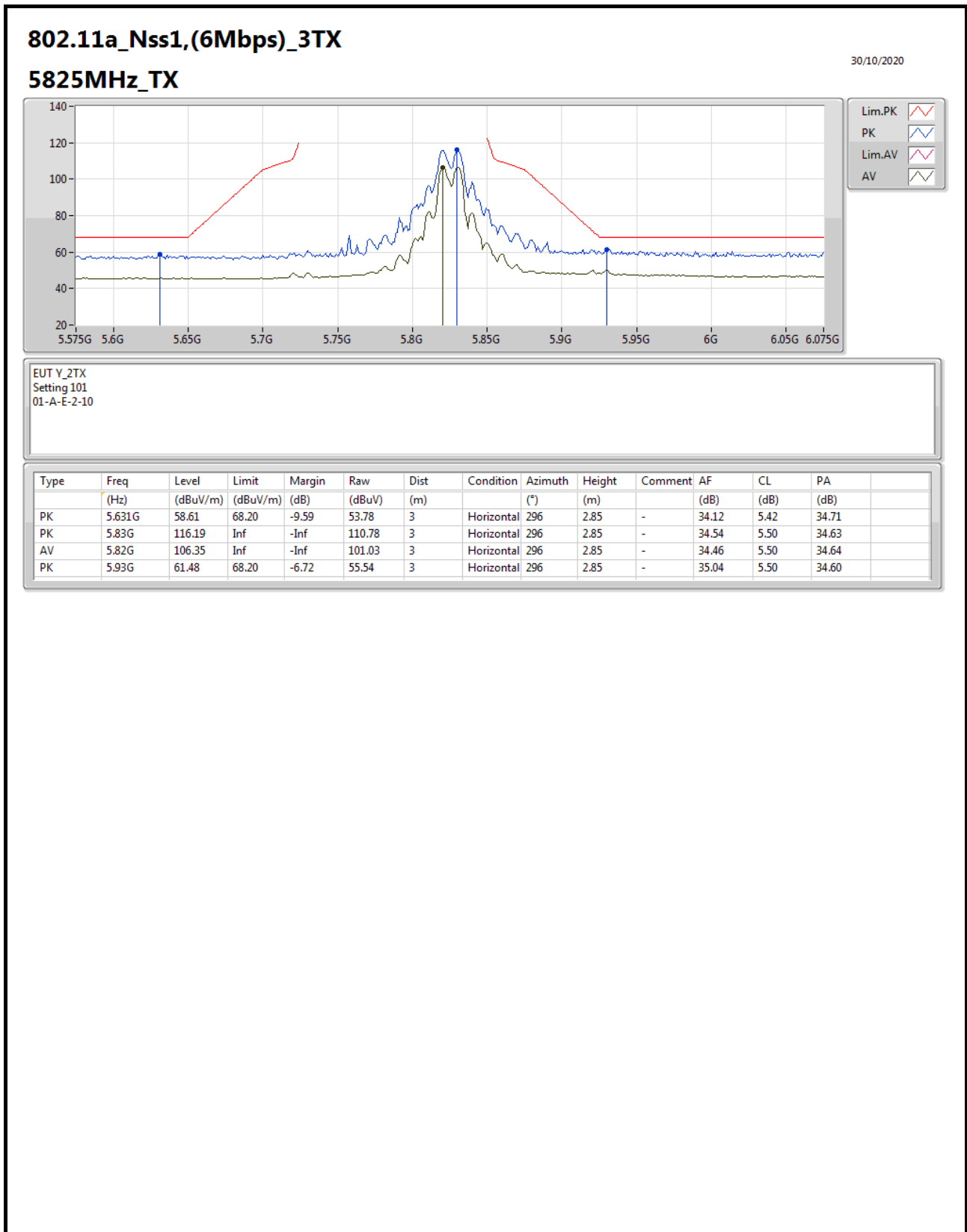


Test Mode: Mode 1



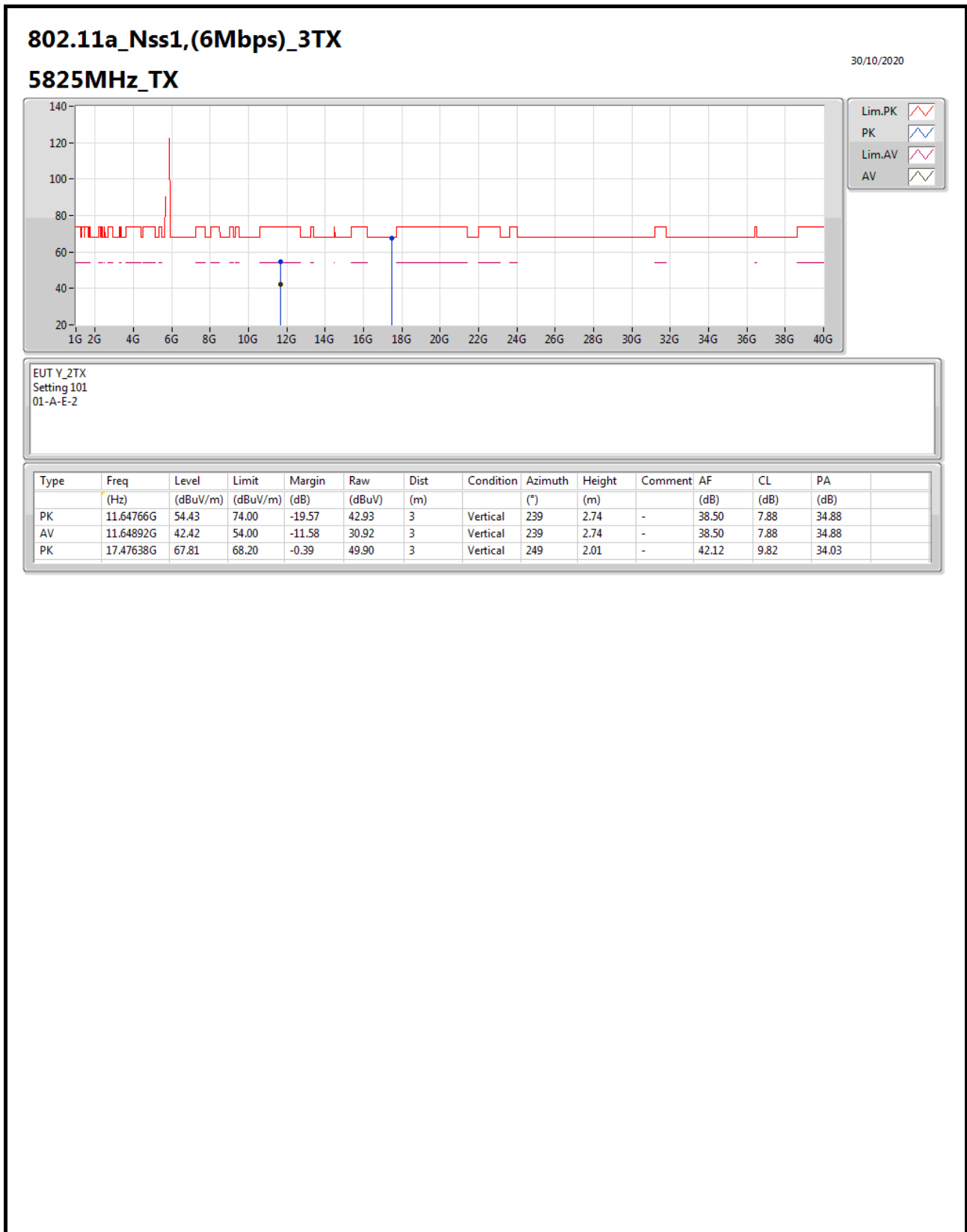


Test Mode: Mode 1



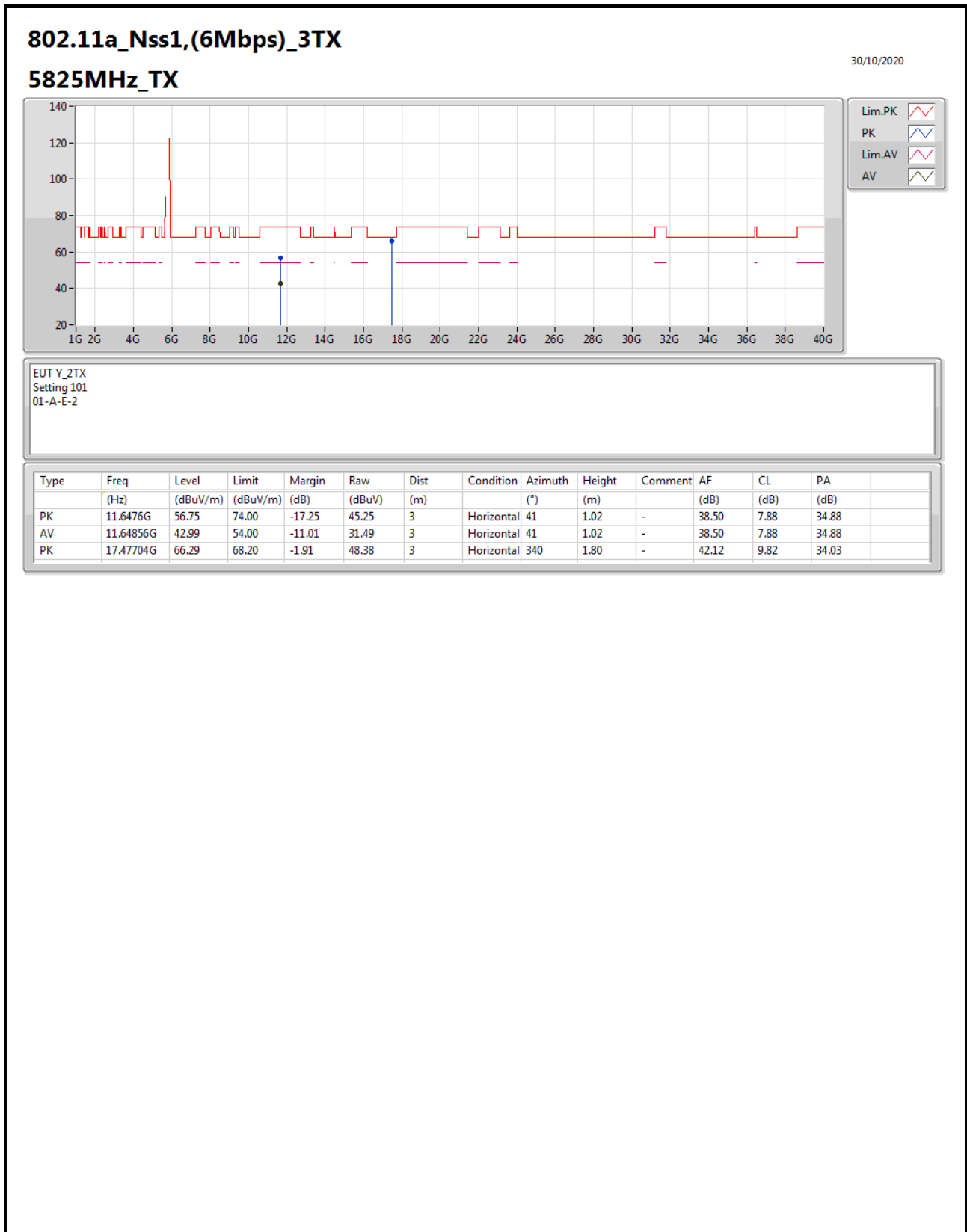


Test Mode: Mode 1



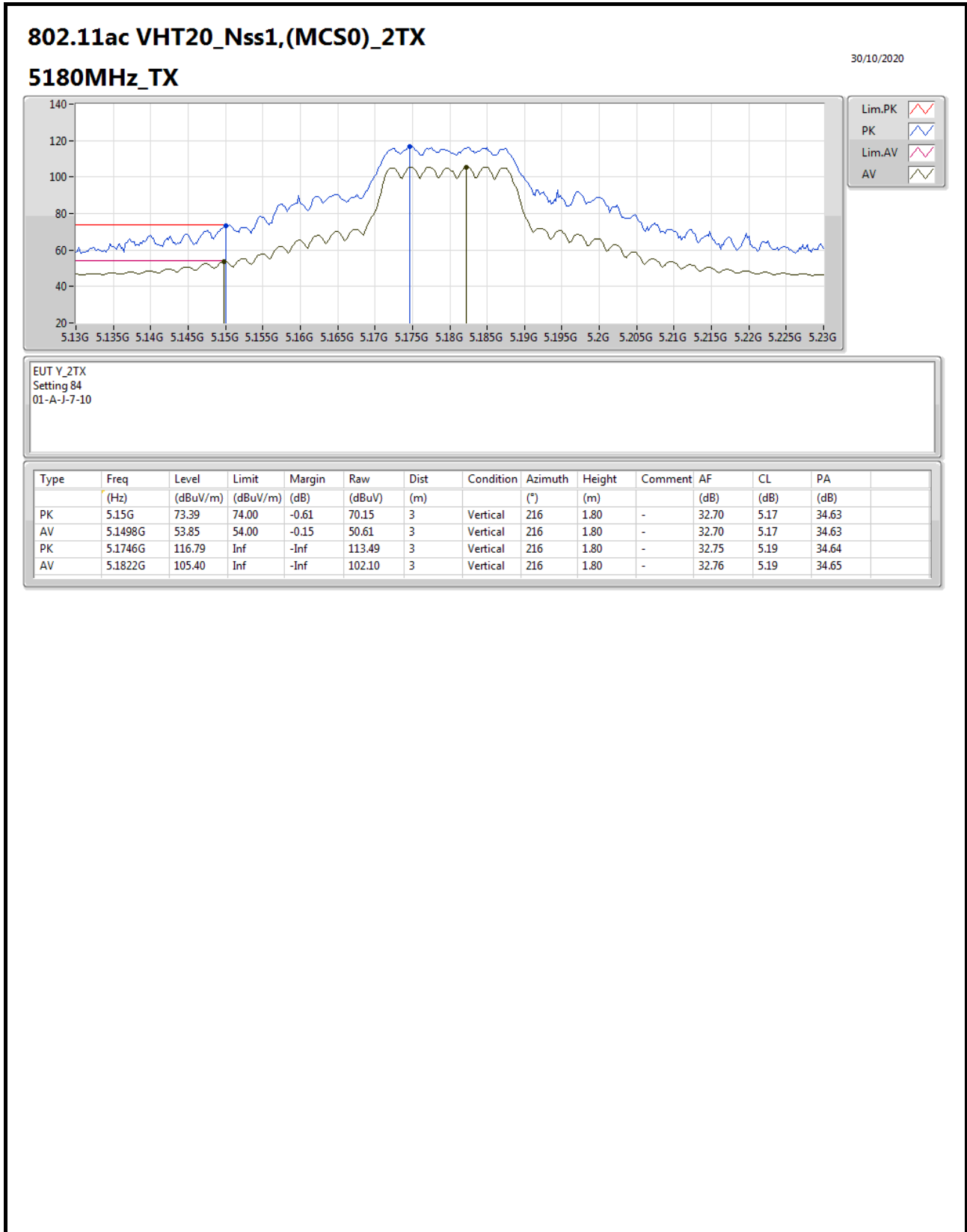


Test Mode: Mode 1





Test Mode: Mode 1



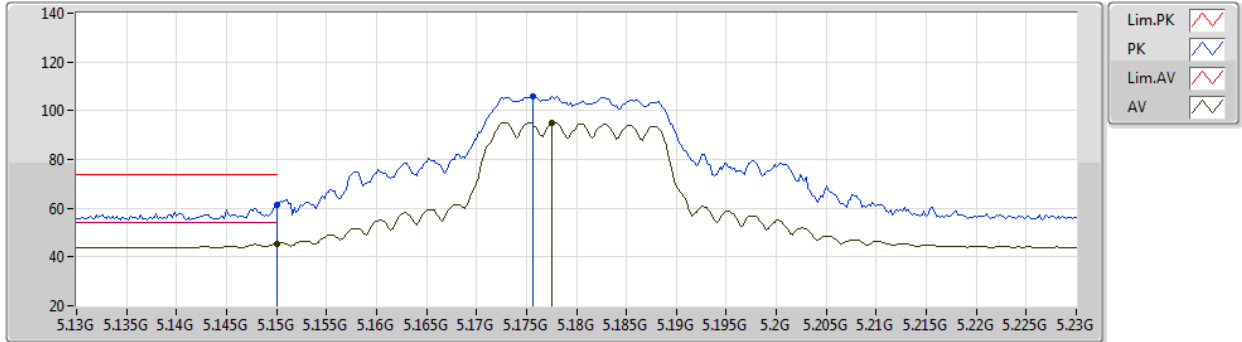


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_2TX

30/10/2020

5180MHz_TX

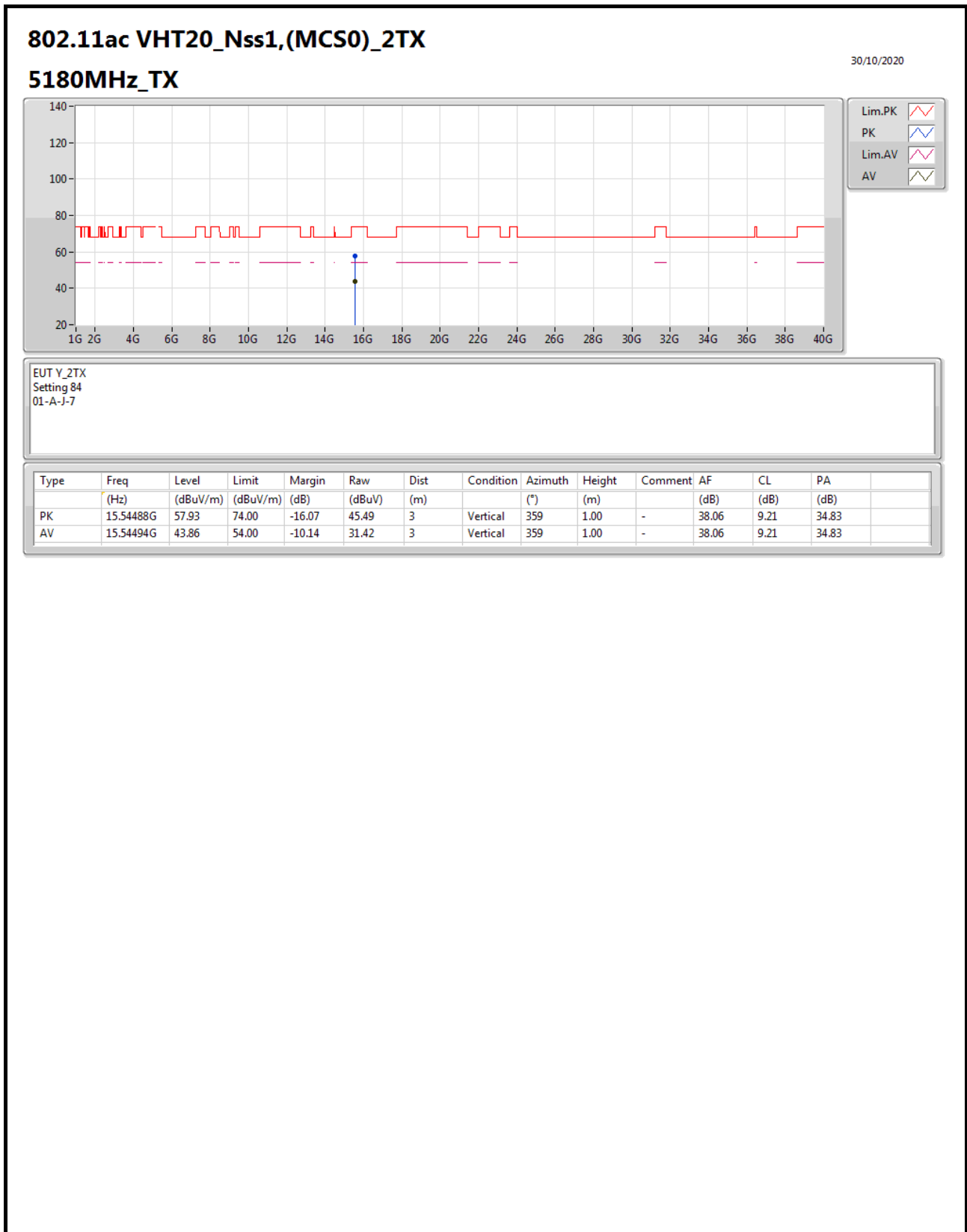


EUT Y_2TX
Setting 84
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	61.42	74.00	-12.58	58.18	3	Horizontal	90	2.66	-	32.70	5.17	34.63
AV	5.15G	45.56	54.00	-8.44	42.32	3	Horizontal	90	2.66	-	32.70	5.17	34.63
PK	5.1756G	106.05	Inf	-Inf	102.75	3	Horizontal	90	2.66	-	32.75	5.19	34.64
AV	5.1776G	95.05	Inf	-Inf	91.74	3	Horizontal	90	2.66	-	32.76	5.19	34.64

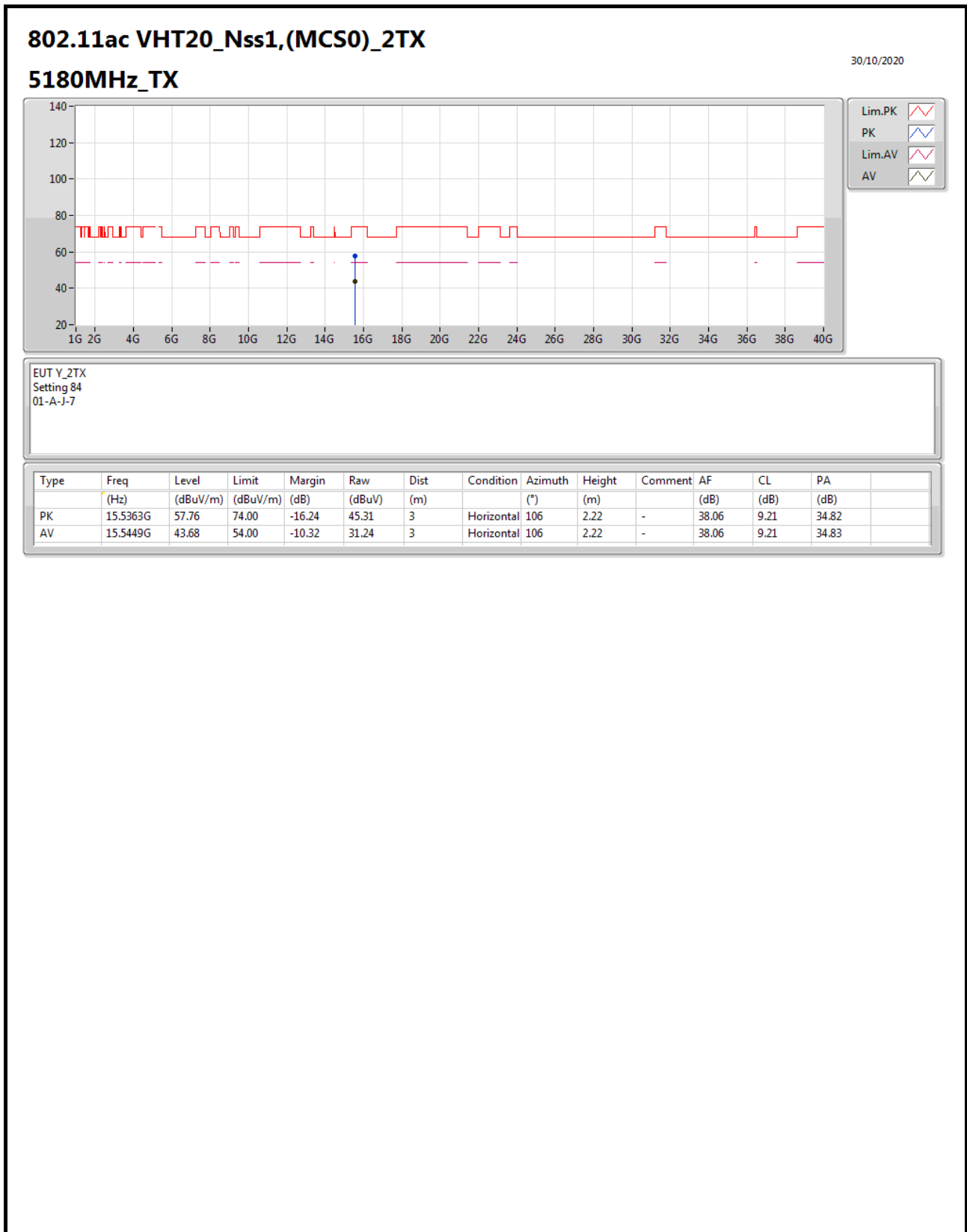


Test Mode: Mode 1



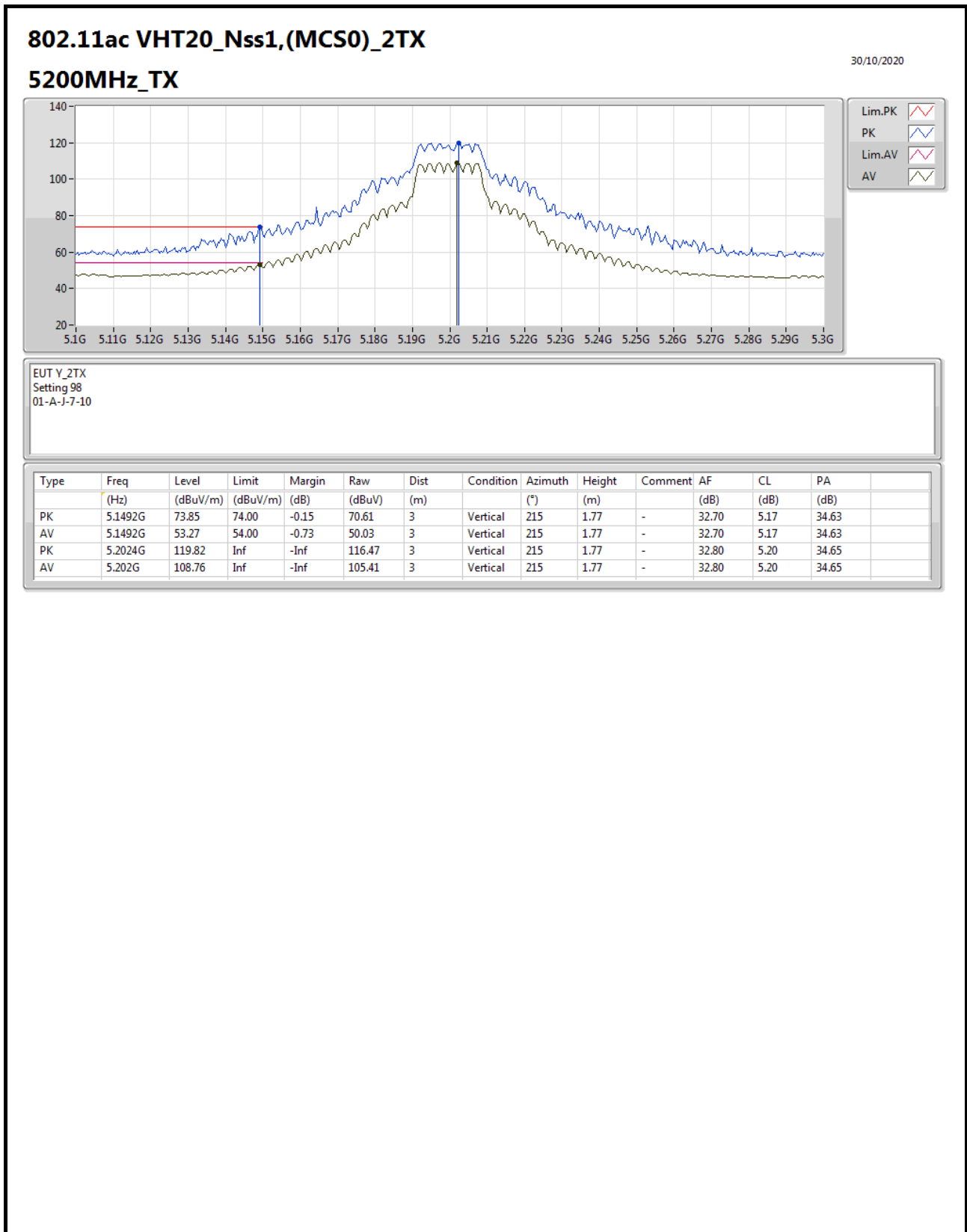


Test Mode: Mode 1



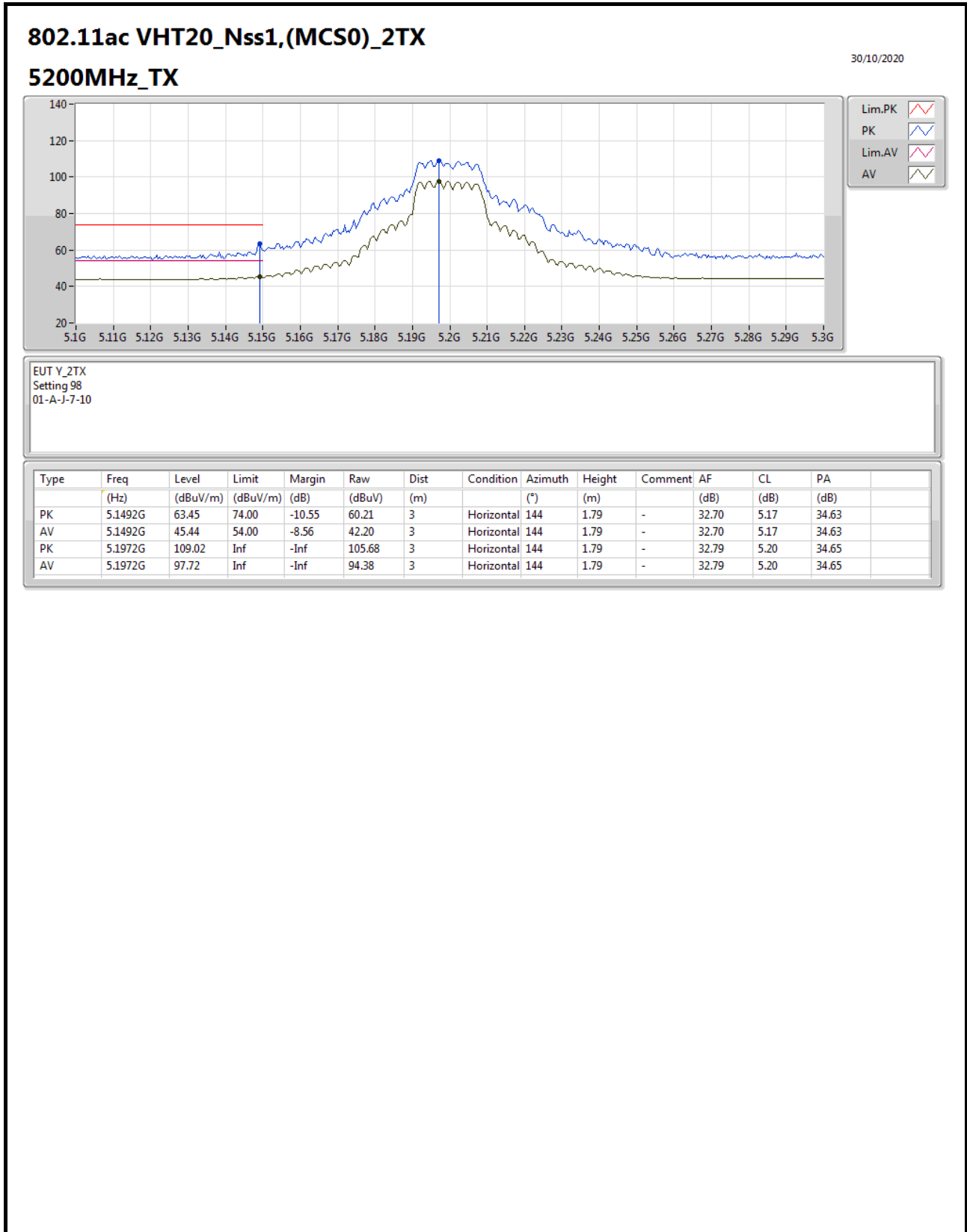


Test Mode: Mode 1



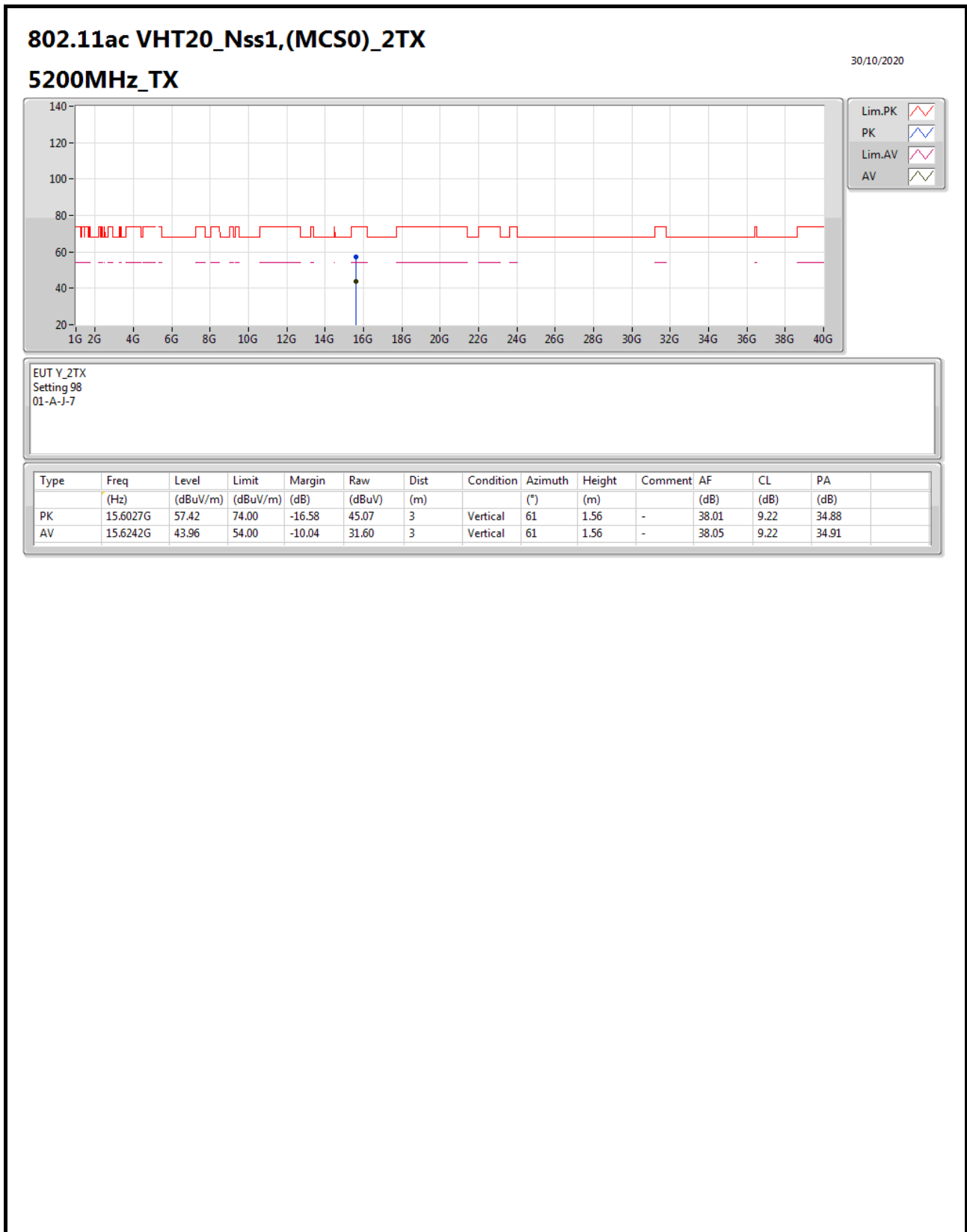


Test Mode: Mode 1



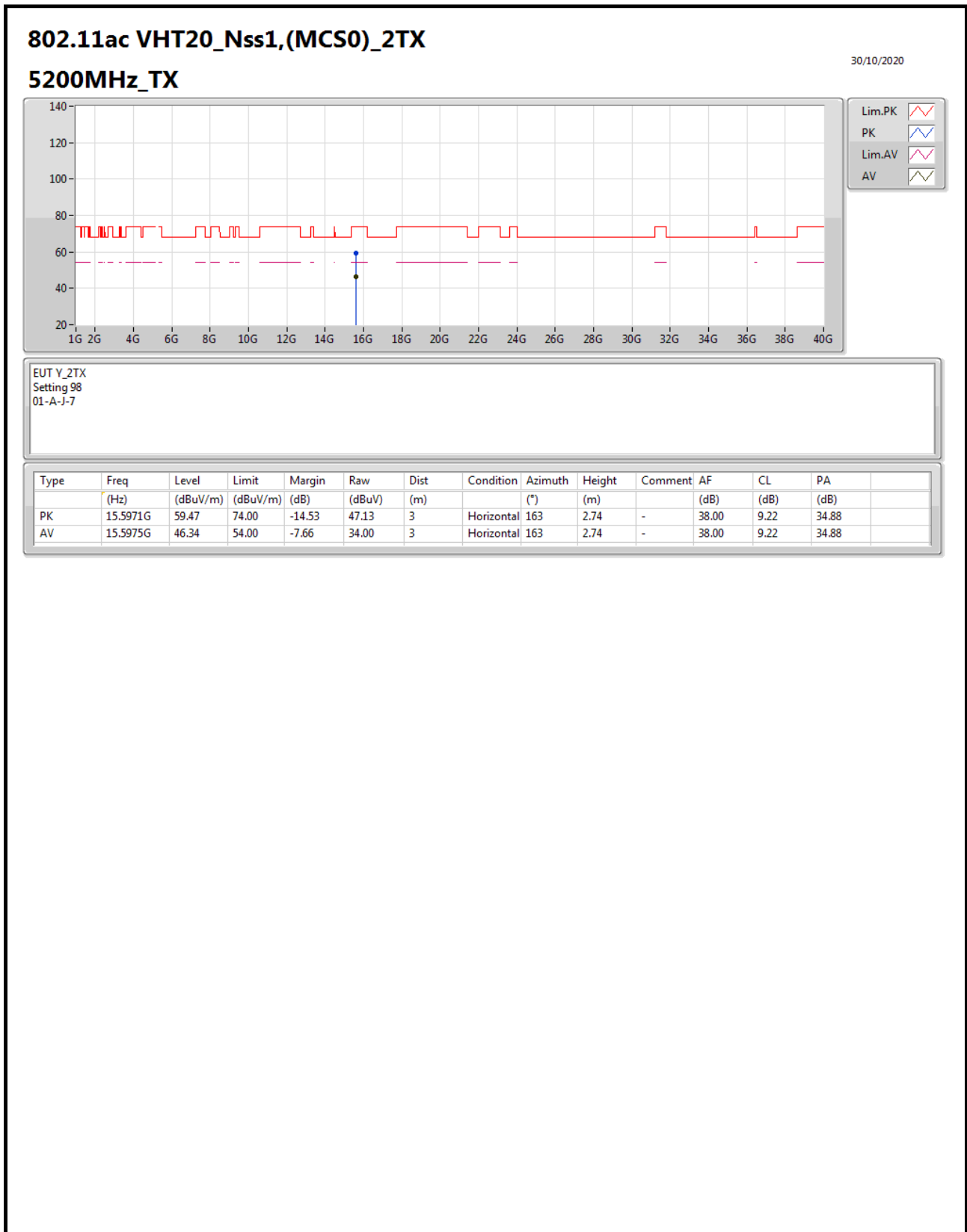


Test Mode: Mode 1





Test Mode: Mode 1



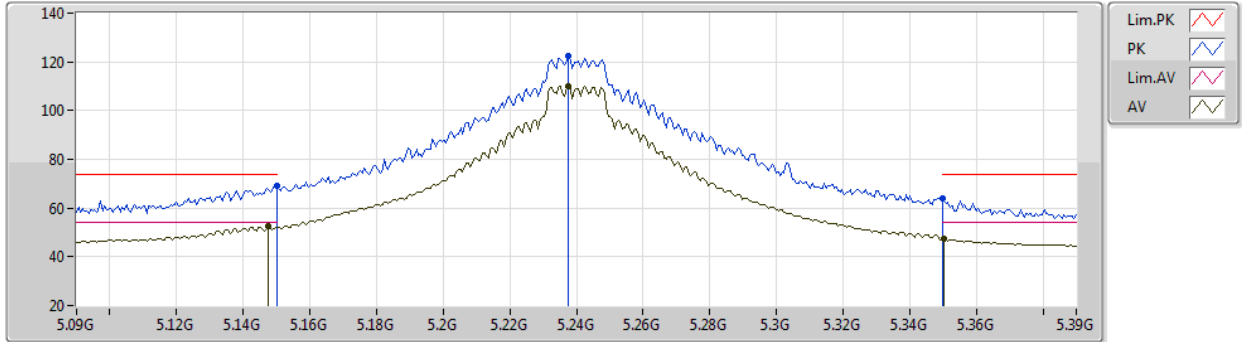


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_2TX

30/10/2020

5240MHz_TX



EUT_Y_2TX
Setting 105
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	69.19	74.00	-4.81	65.95	3	Vertical	220	1.66	-	32.70	5.17	34.63
AV	5.1476G	52.46	54.00	-1.54	49.22	3	Vertical	220	1.66	-	32.70	5.17	34.63
PK	5.2376G	122.24	Inf	-Inf	118.79	3	Vertical	220	1.66	-	32.88	5.24	34.67
AV	5.2376G	110.11	Inf	-Inf	106.66	3	Vertical	220	1.66	-	32.88	5.24	34.67
PK	5.35G	63.89	74.00	-10.11	60.15	3	Vertical	220	1.66	-	33.10	5.35	34.71
AV	5.3504G	47.18	54.00	-6.82	43.44	3	Vertical	220	1.66	-	33.10	5.35	34.71

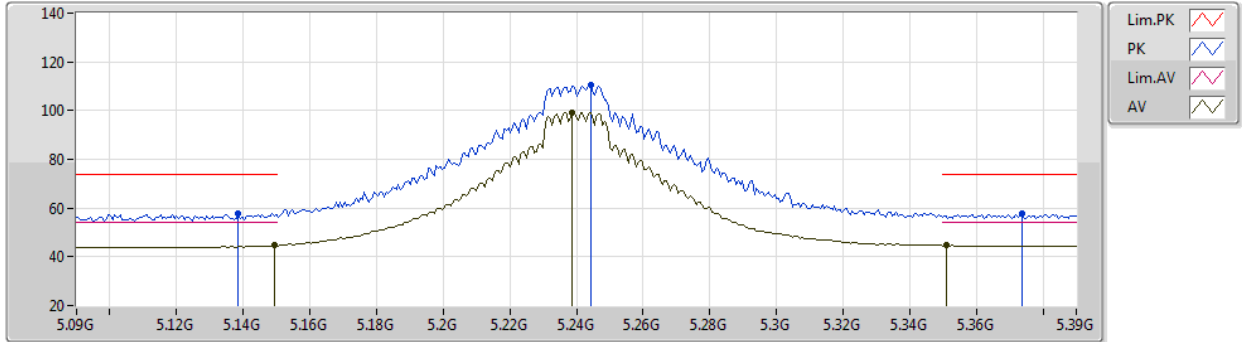


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_2TX

30/10/2020

5240MHz_TX

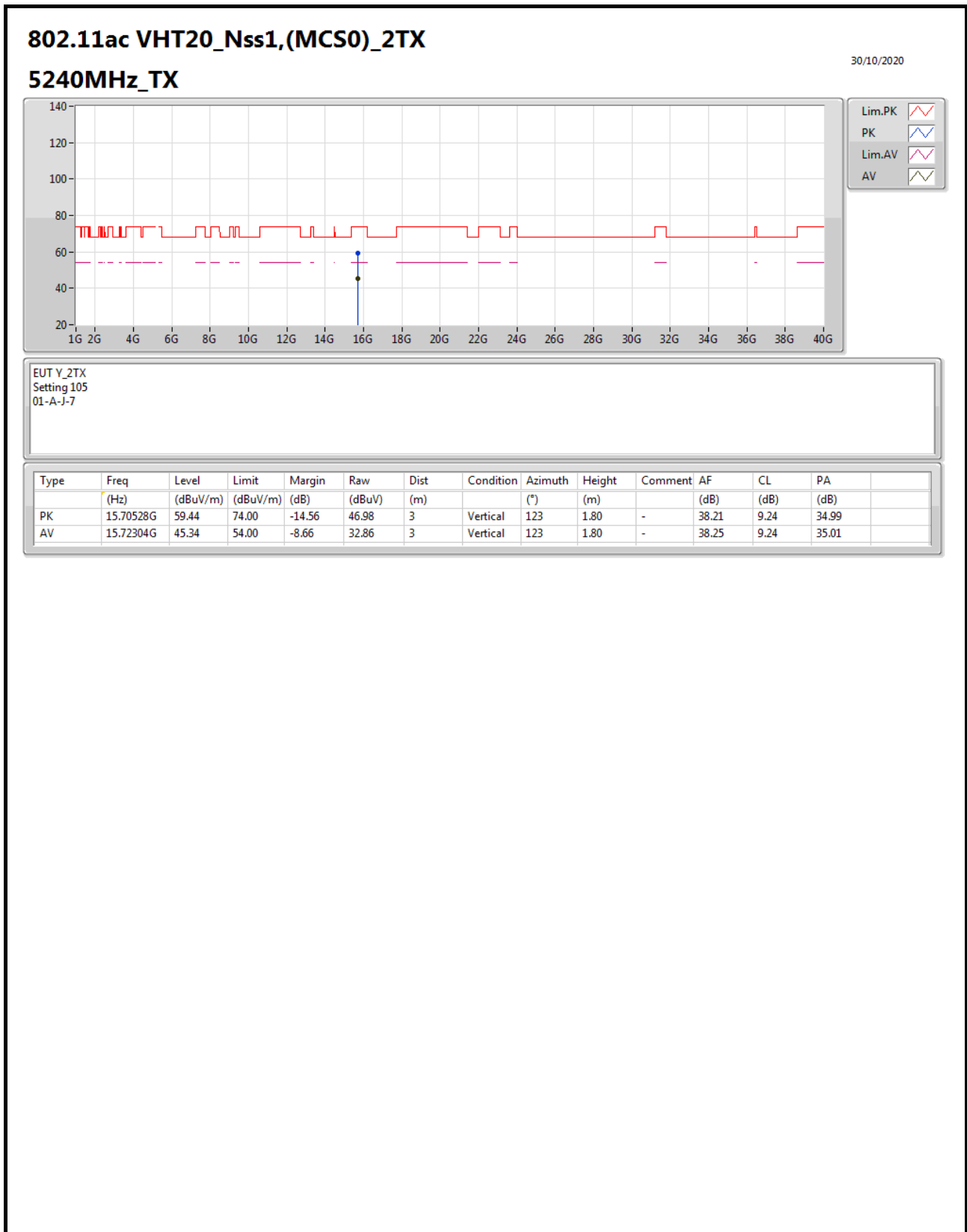


EUT_Y_2TX
Setting 105
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1386G	57.78	74.00	-16.22	54.52	3	Horizontal	62	1.93	-	32.72	5.17	34.63
AV	5.1494G	44.65	54.00	-9.35	41.41	3	Horizontal	62	1.93	-	32.70	5.17	34.63
PK	5.2442G	110.68	Inf	-Inf	107.22	3	Horizontal	62	1.93	-	32.89	5.24	34.67
AV	5.2388G	99.04	Inf	-Inf	95.59	3	Horizontal	62	1.93	-	32.88	5.24	34.67
PK	5.3738G	57.64	74.00	-16.36	53.83	3	Horizontal	62	1.93	-	33.15	5.37	34.71
AV	5.351G	44.57	54.00	-9.43	40.83	3	Horizontal	62	1.93	-	33.10	5.35	34.71

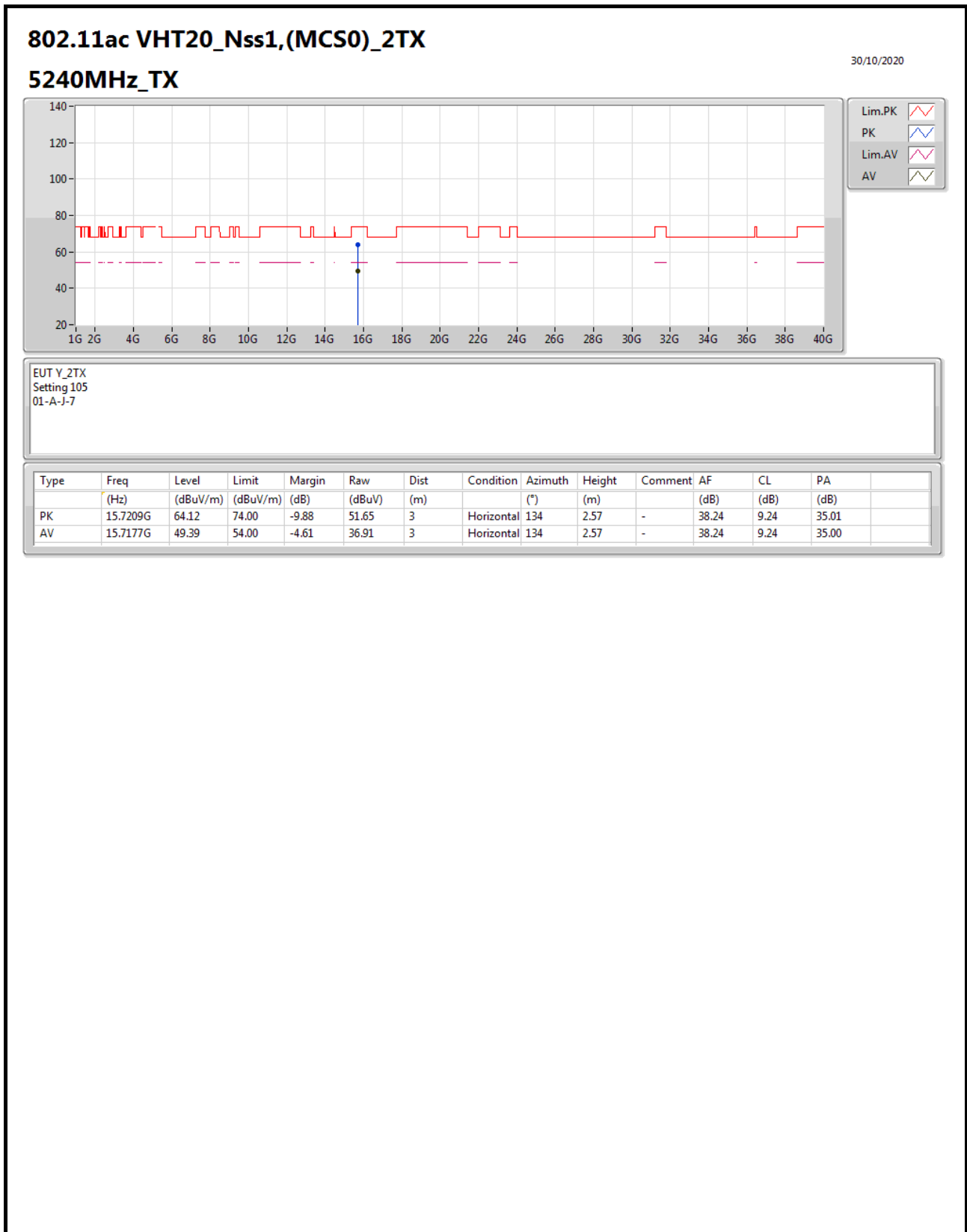


Test Mode: Mode 1





Test Mode: Mode 1



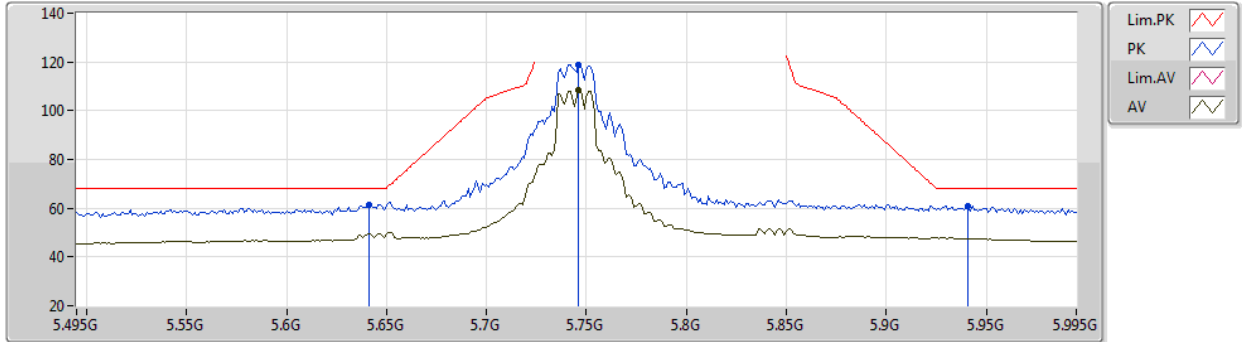


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_3TX

30/10/2020

5745MHz_TX



EUT_Y_2TX
Setting 96
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.641G	61.58	68.20	-6.62	56.71	3	Vertical	64	1.00	-	34.16	5.42	34.71
PK	5.746G	119.01	Inf	-Inf	113.93	3	Vertical	64	1.00	-	34.28	5.47	34.67
AV	5.746G	108.38	Inf	-Inf	103.30	3	Vertical	64	1.00	-	34.28	5.47	34.67
PK	5.941G	60.99	68.20	-7.21	54.95	3	Vertical	64	1.00	-	35.13	5.50	34.59

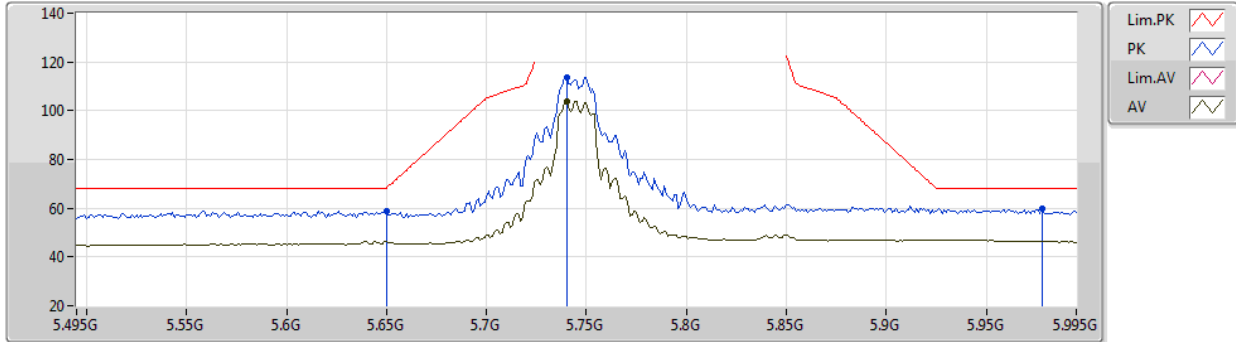


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_3TX

30/10/2020

5745MHz_TX

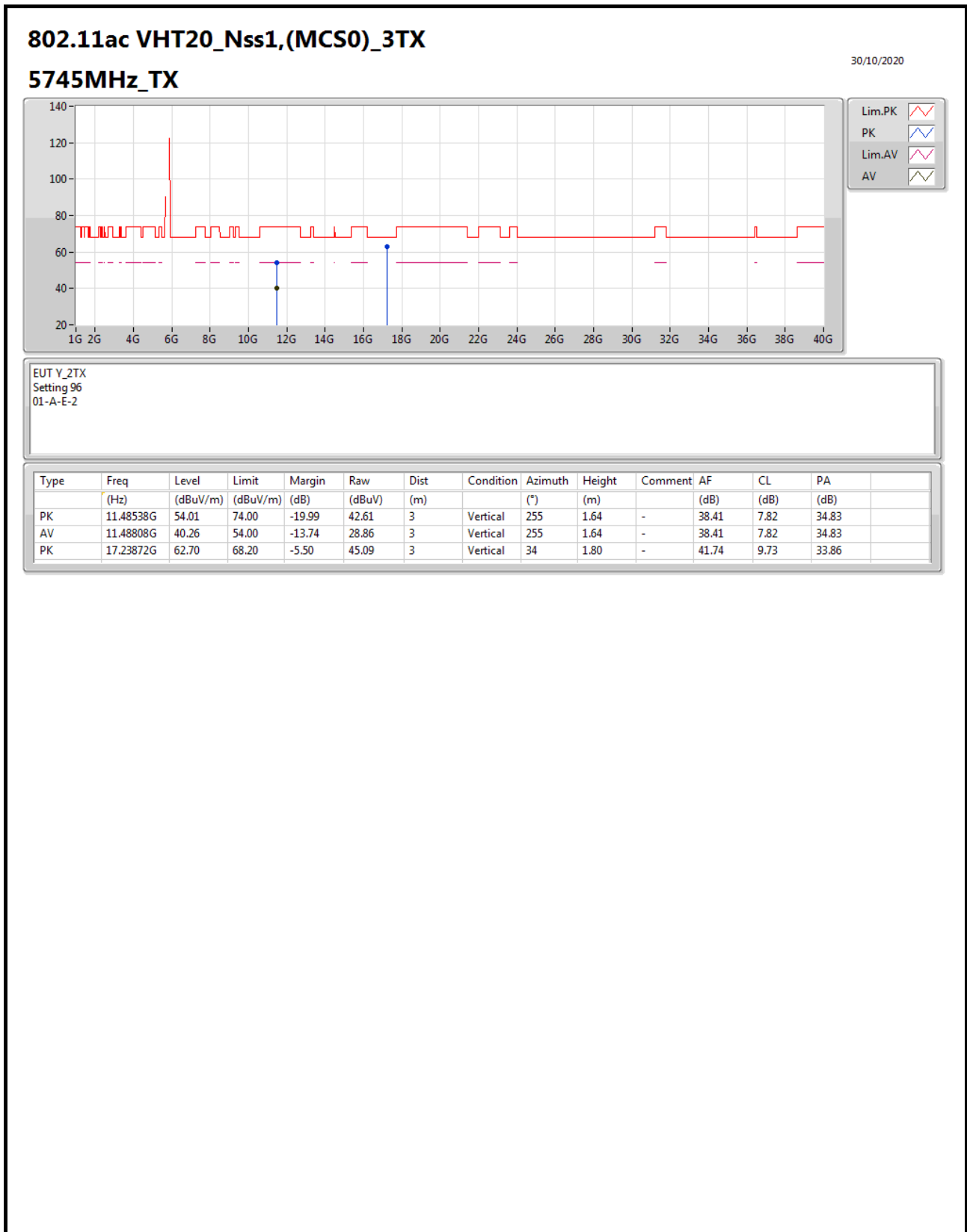


EUT_Y_2TX
Setting 96
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.65G	58.79	68.20	-9.41	53.86	3	Horizontal	171	2.53	-	34.20	5.43	34.70
PK	5.74G	113.68	Inf	-Inf	108.64	3	Horizontal	171	2.53	-	34.24	5.47	34.67
AV	5.74G	103.77	Inf	-Inf	98.73	3	Horizontal	171	2.53	-	34.24	5.47	34.67
PK	5.978G	60.02	68.20	-8.18	53.84	3	Horizontal	171	2.53	-	35.26	5.50	34.58

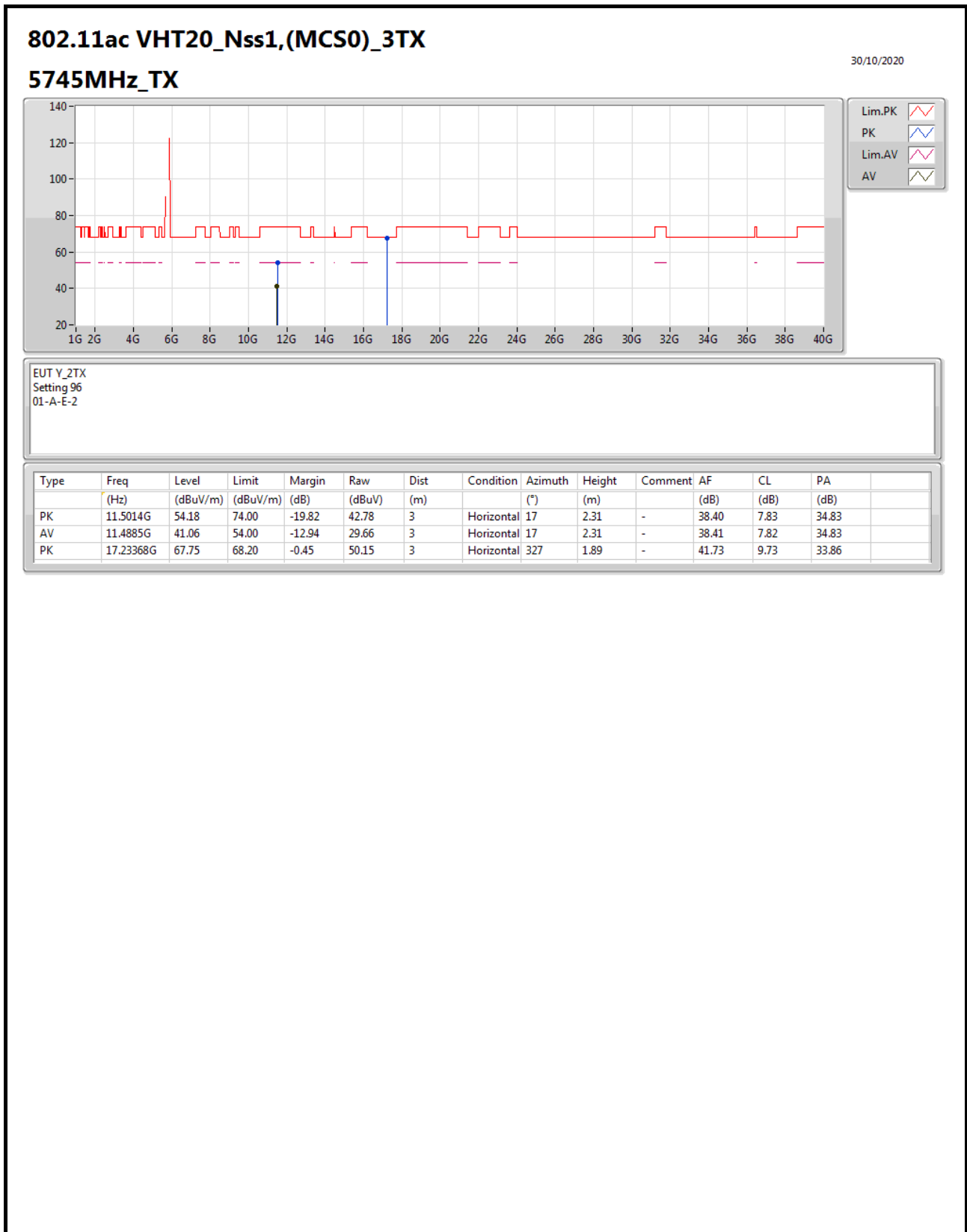


Test Mode: Mode 1

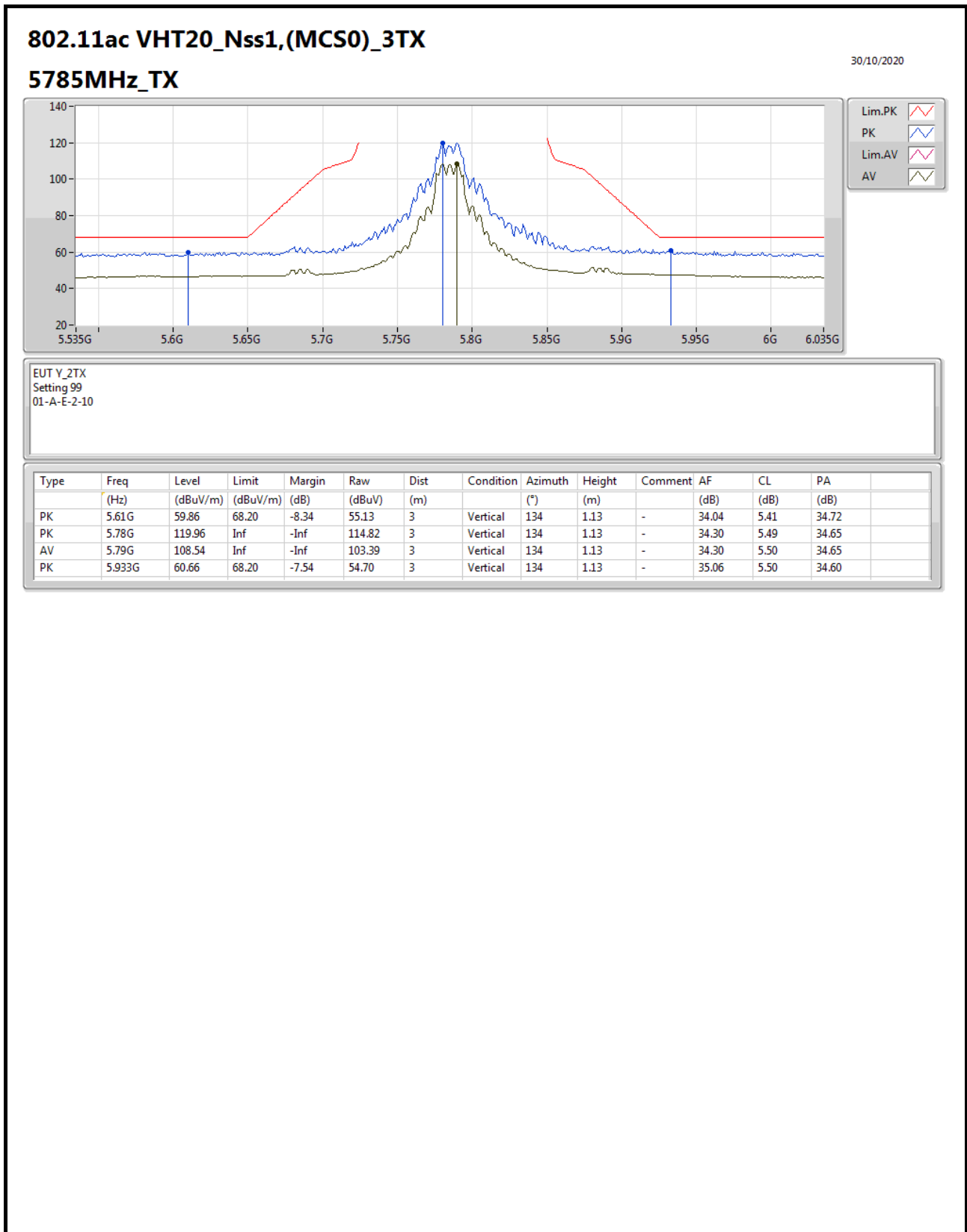




Test Mode: Mode 1

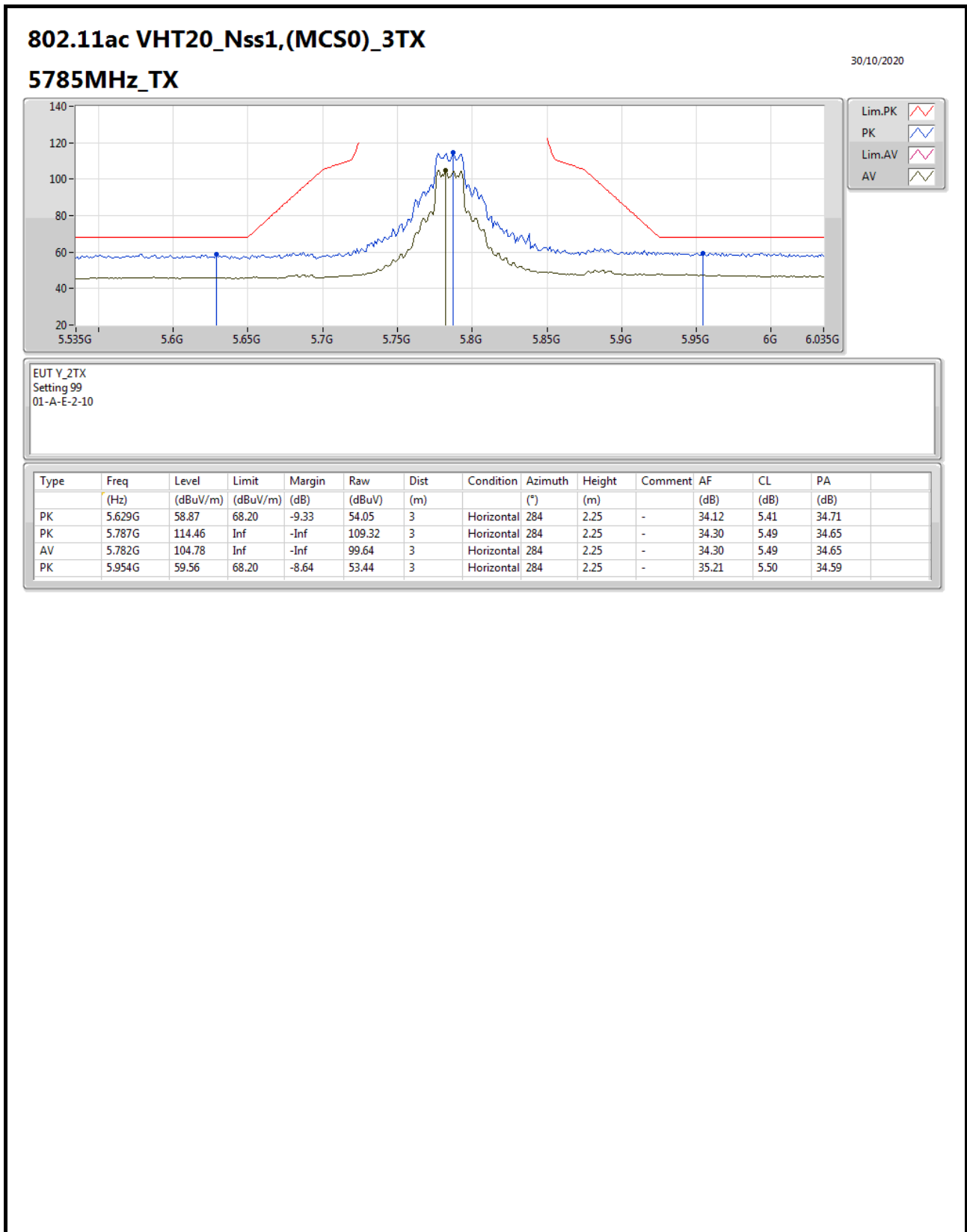


Test Mode: Mode 1



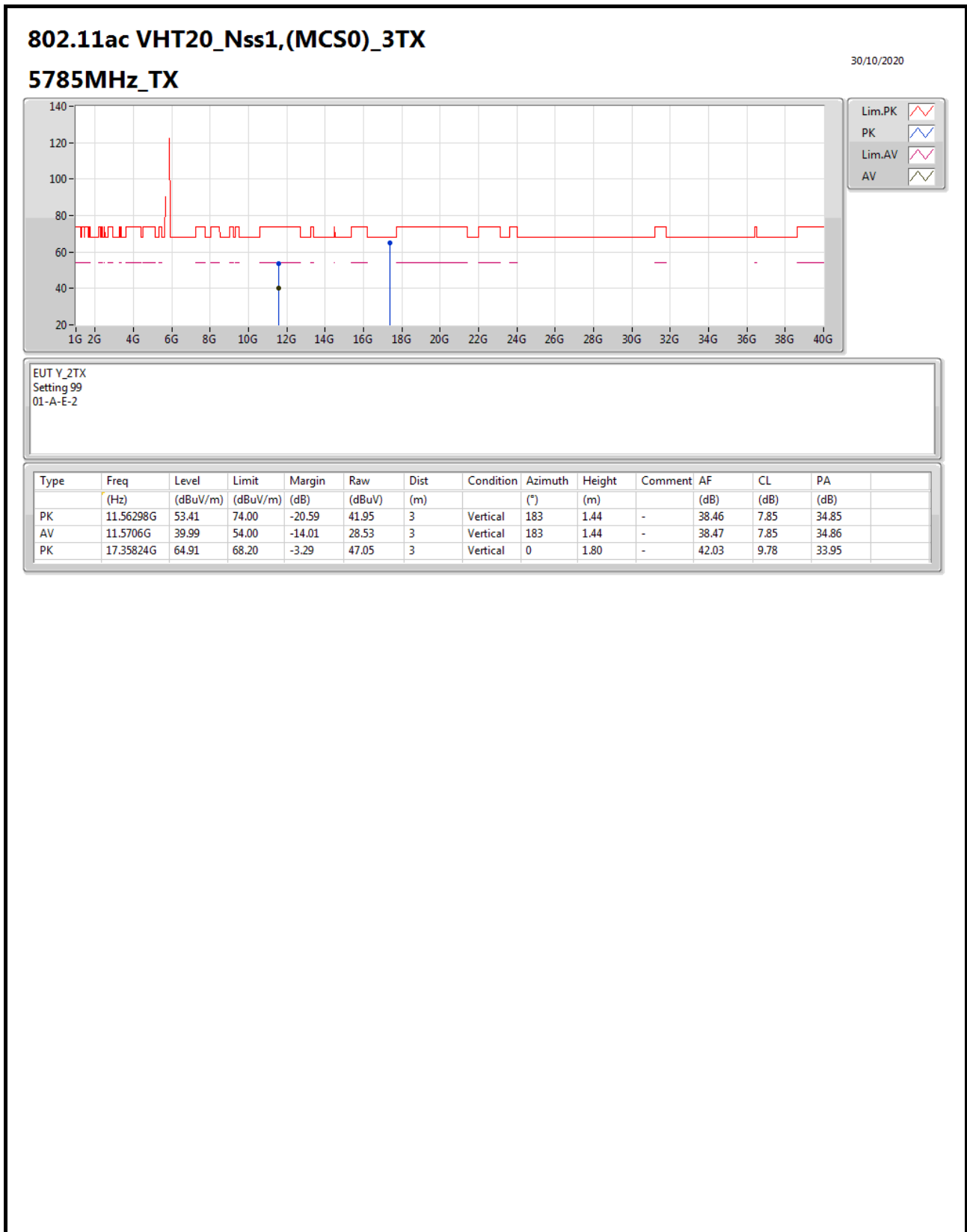


Test Mode: Mode 1



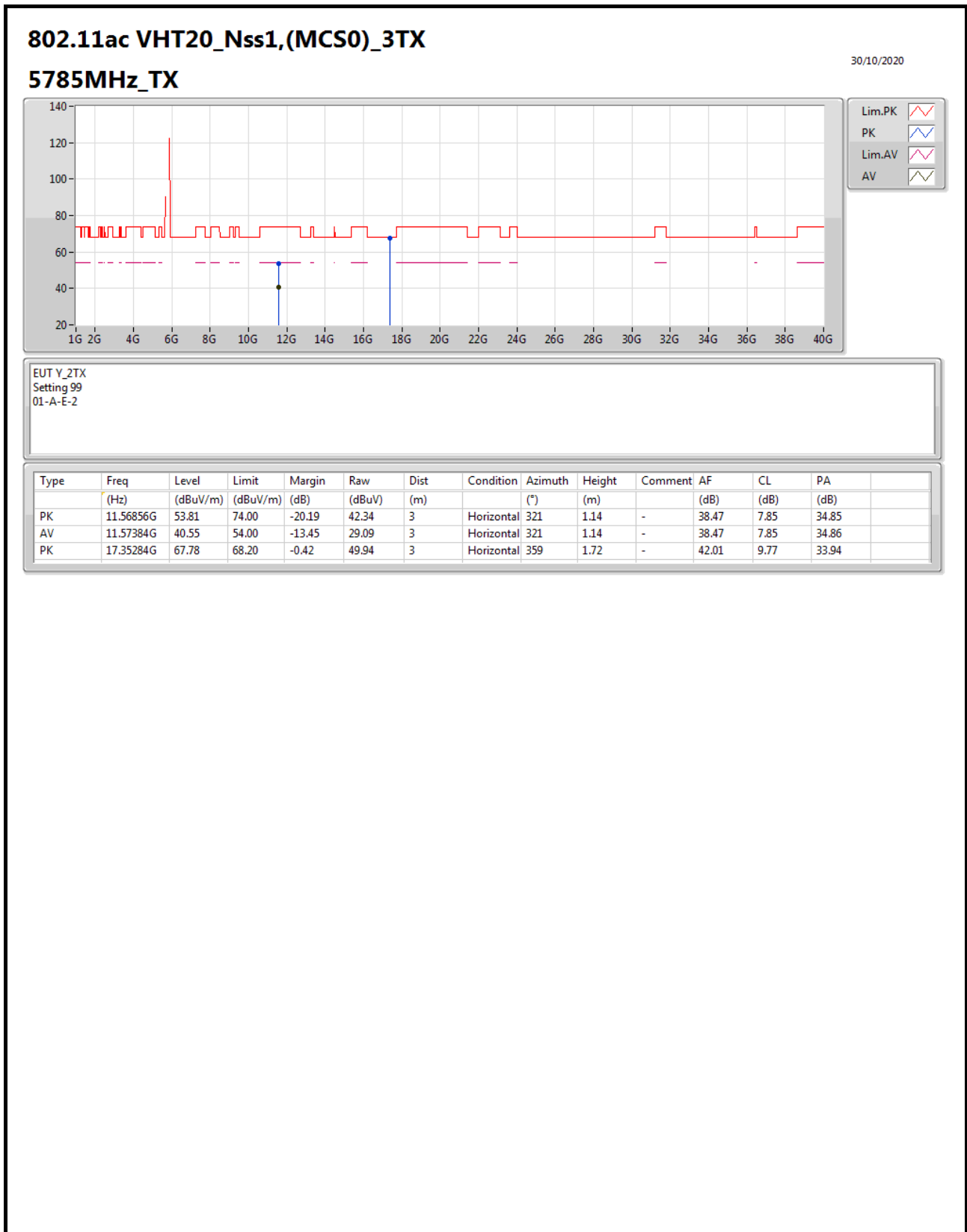


Test Mode: Mode 1





Test Mode: Mode 1

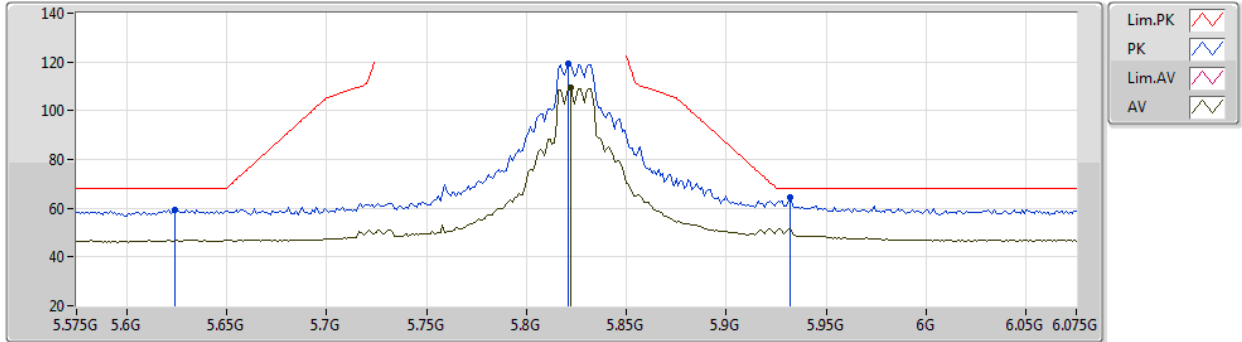


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_3TX

30/10/2020

5825MHz_TX



EUT_Y_2TX
Setting 99
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.624G	59.24	68.20	-8.96	54.44	3	Vertical	65	1.03	-	34.10	5.41	34.71
PK	5.821G	119.14	Inf	-Inf	113.81	3	Vertical	65	1.03	-	34.47	5.50	34.64
AV	5.822G	109.26	Inf	-Inf	103.92	3	Vertical	65	1.03	-	34.48	5.50	34.64
PK	5.932G	64.24	68.20	-3.96	58.28	3	Vertical	65	1.03	-	35.06	5.50	34.60

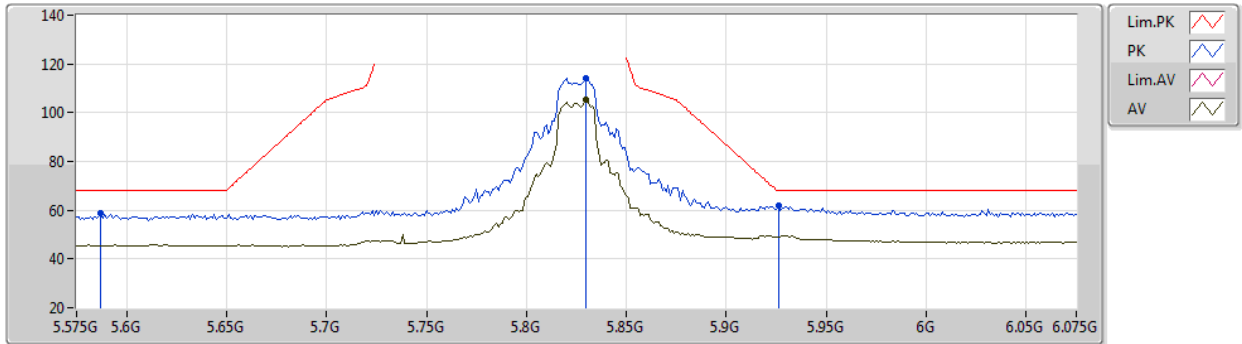


Test Mode: Mode 1

802.11ac VHT20_Nss1,(MCS0)_3TX

30/10/2020

5825MHz_TX

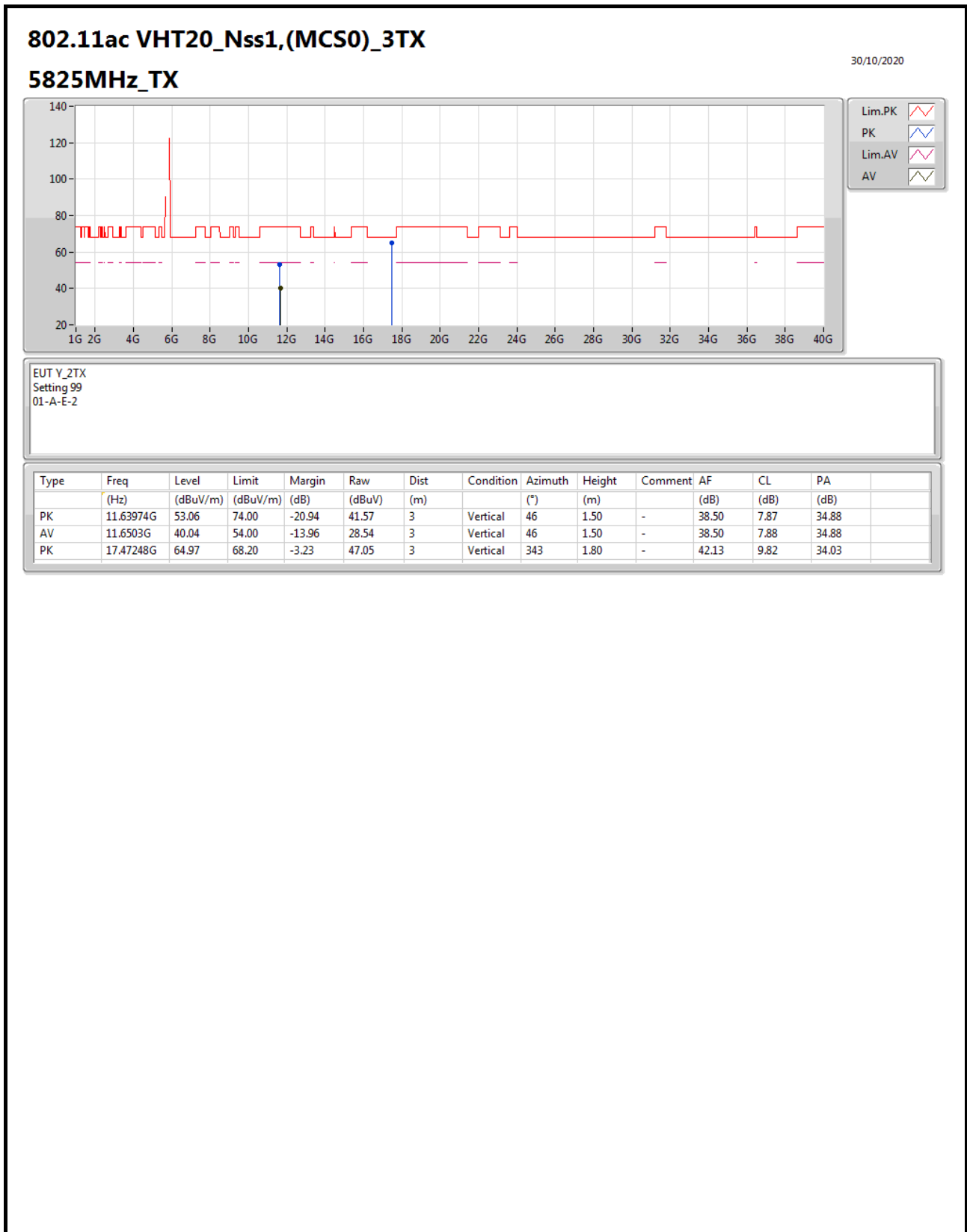


EUT_Y_2TX
Setting 99
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.587G	58.59	68.20	-9.61	53.95	3	Horizontal	270	1.75	-	33.97	5.40	34.73
PK	5.83G	114.20	Inf	-Inf	108.79	3	Horizontal	270	1.75	-	34.54	5.50	34.63
AV	5.83G	105.31	Inf	-Inf	99.90	3	Horizontal	270	1.75	-	34.54	5.50	34.63
PK	5.926G	61.65	68.20	-6.55	55.74	3	Horizontal	270	1.75	-	35.01	5.50	34.60

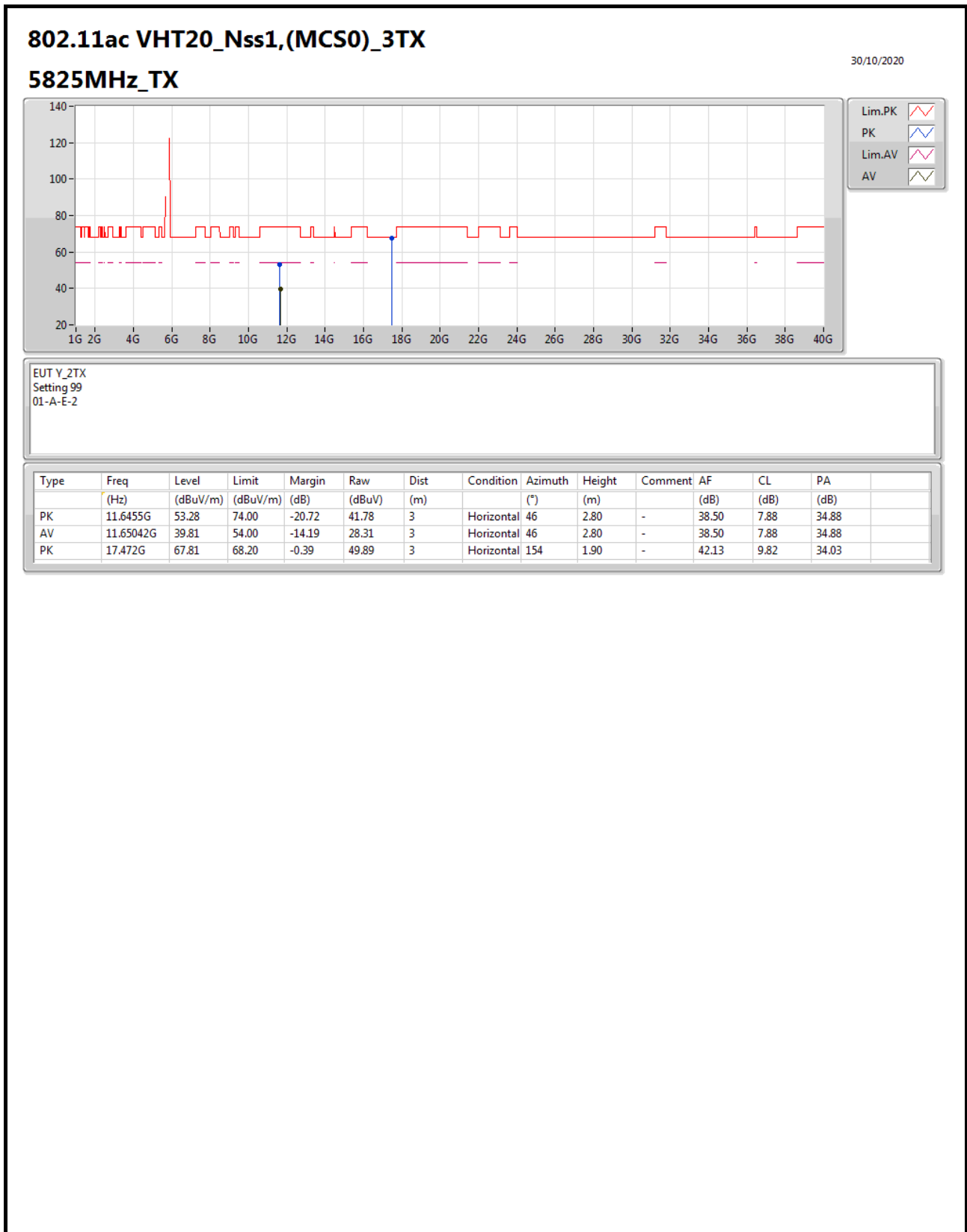


Test Mode: Mode 1



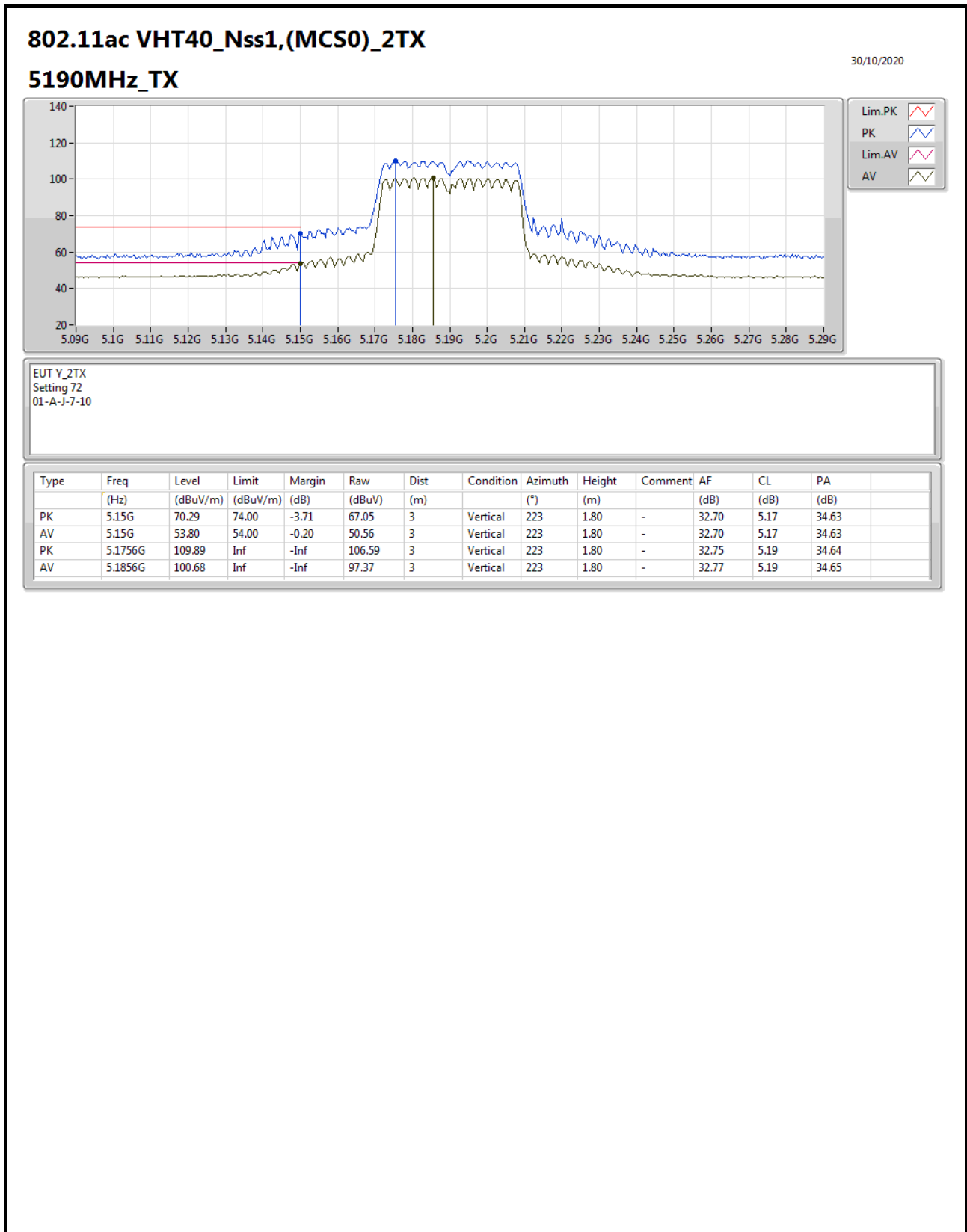


Test Mode: Mode 1





Test Mode: Mode 1



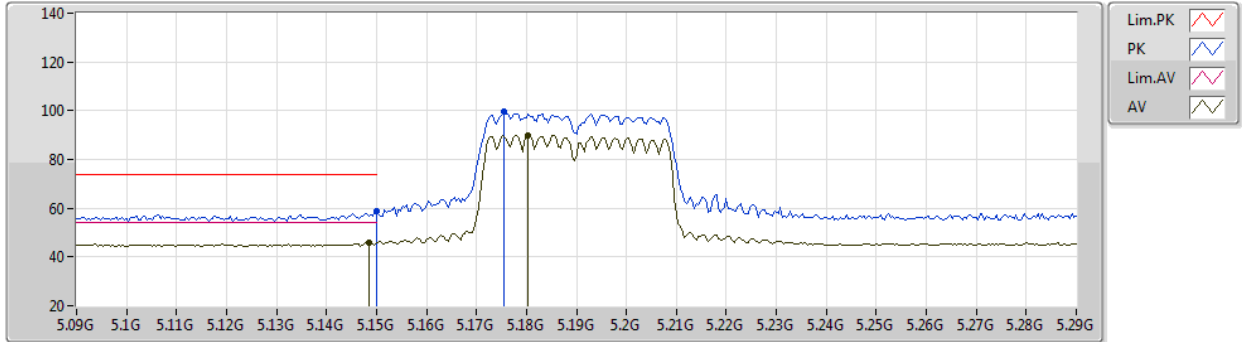


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_2TX

30/10/2020

5190MHz_TX

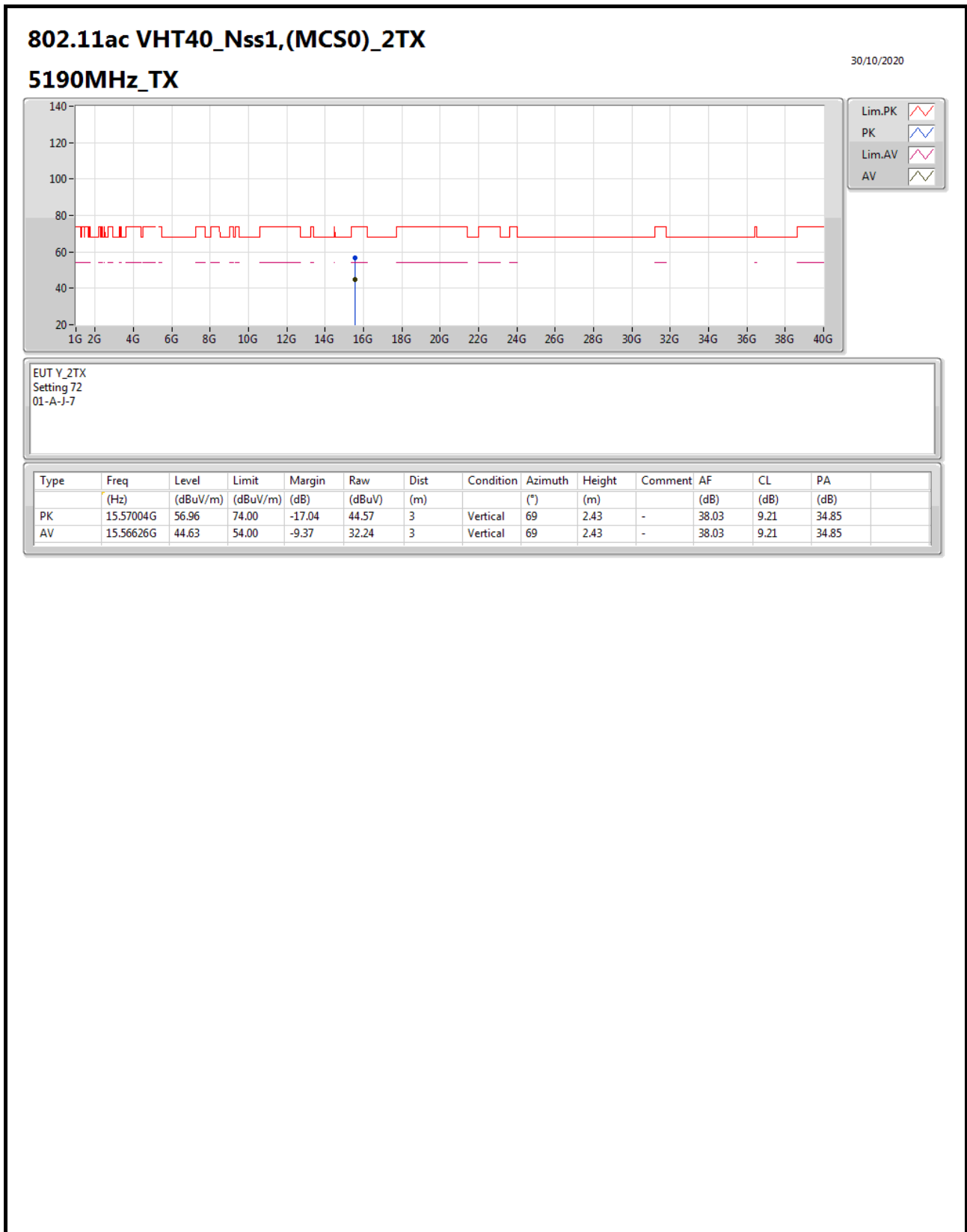


EUT Y_2TX
Setting 72
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	58.96	74.00	-15.04	55.72	3	Horizontal	92	2.72	-	32.70	5.17	34.63
AV	5.1484G	45.94	54.00	-8.06	42.70	3	Horizontal	92	2.72	-	32.70	5.17	34.63
PK	5.1756G	99.45	Inf	-Inf	96.15	3	Horizontal	92	2.72	-	32.75	5.19	34.64
AV	5.1804G	89.82	Inf	-Inf	86.51	3	Horizontal	92	2.72	-	32.76	5.19	34.64

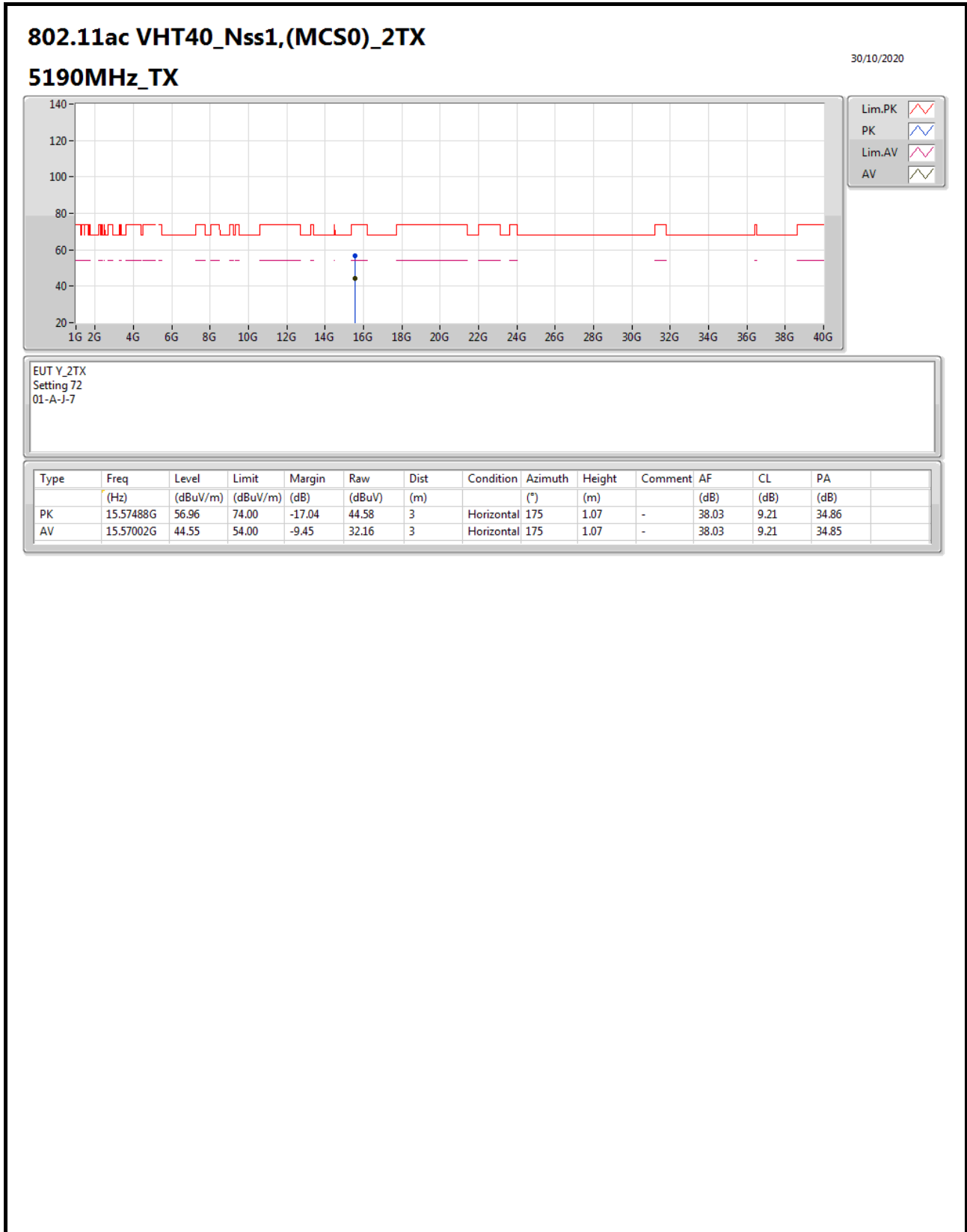


Test Mode: Mode 1





Test Mode: Mode 1



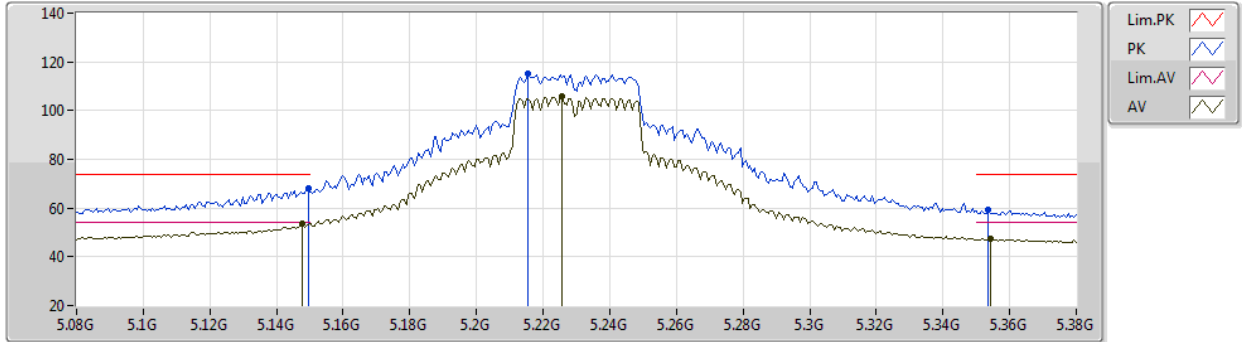


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_2TX

30/10/2020

5230MHz_TX



EUT_Y_2TX
Setting 95
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	67.85	74.00	-6.15	64.61	3	Vertical	228	1.94	-	32.70	5.17	34.63
AV	5.1478G	53.72	54.00	-0.28	50.48	3	Vertical	228	1.94	-	32.70	5.17	34.63
PK	5.2156G	115.09	Inf	-Inf	111.70	3	Vertical	228	1.94	-	32.83	5.22	34.66
AV	5.2258G	105.70	Inf	-Inf	102.28	3	Vertical	228	1.94	-	32.85	5.23	34.66
PK	5.3536G	59.33	74.00	-14.67	55.58	3	Vertical	228	1.94	-	33.11	5.35	34.71
AV	5.3542G	47.31	54.00	-6.69	43.56	3	Vertical	228	1.94	-	33.11	5.35	34.71

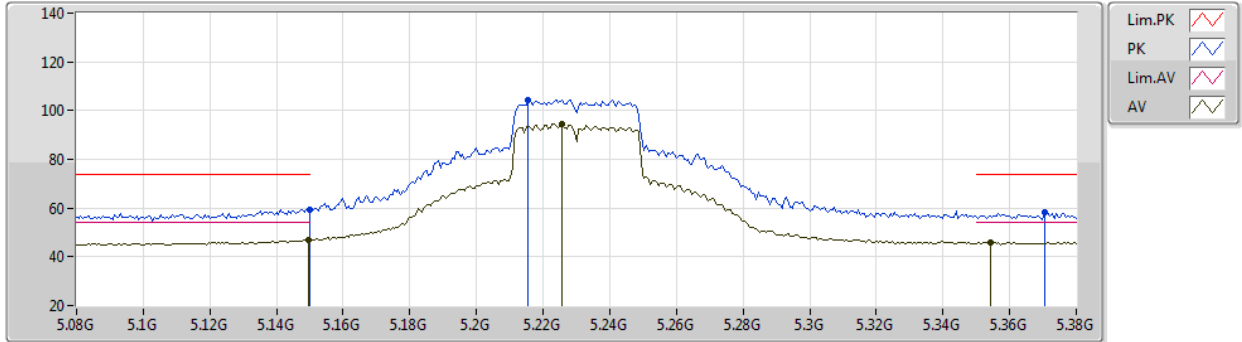


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_2TX

30/10/2020

5230MHz_TX

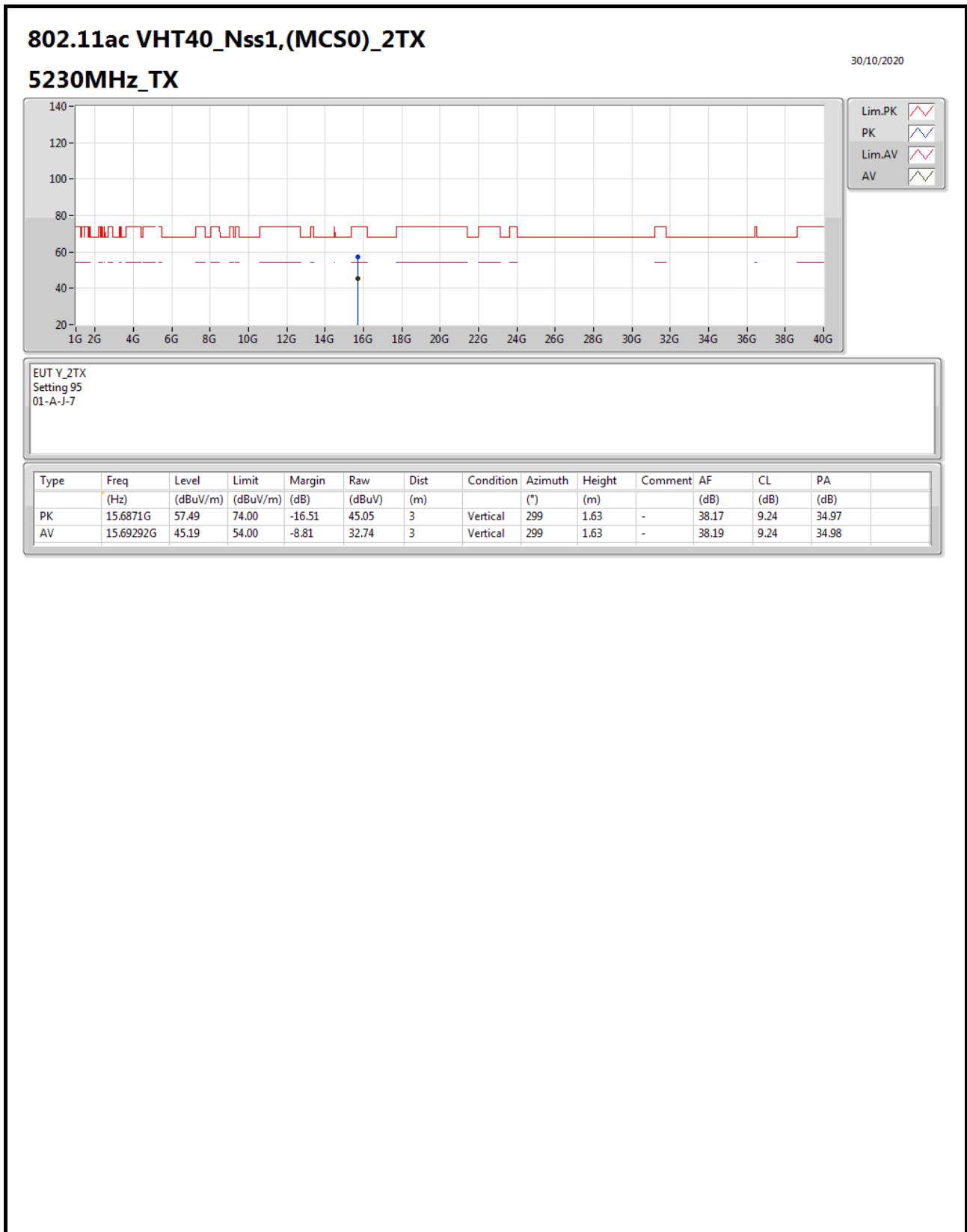


EUT Y_2TX
Setting 95
01-A-J-7-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	59.38	74.00	-14.62	56.14	3	Horizontal	81	1.87	-	32.70	5.17	34.63
AV	5.1496G	47.04	54.00	-6.96	43.80	3	Horizontal	81	1.87	-	32.70	5.17	34.63
PK	5.2156G	104.23	Inf	-Inf	100.84	3	Horizontal	81	1.87	-	32.83	5.22	34.66
AV	5.2258G	94.72	Inf	-Inf	91.30	3	Horizontal	81	1.87	-	32.85	5.23	34.66
PK	5.3704G	58.23	74.00	-15.77	54.43	3	Horizontal	81	1.87	-	33.14	5.37	34.71
AV	5.3542G	46.07	54.00	-7.93	42.32	3	Horizontal	81	1.87	-	33.11	5.35	34.71

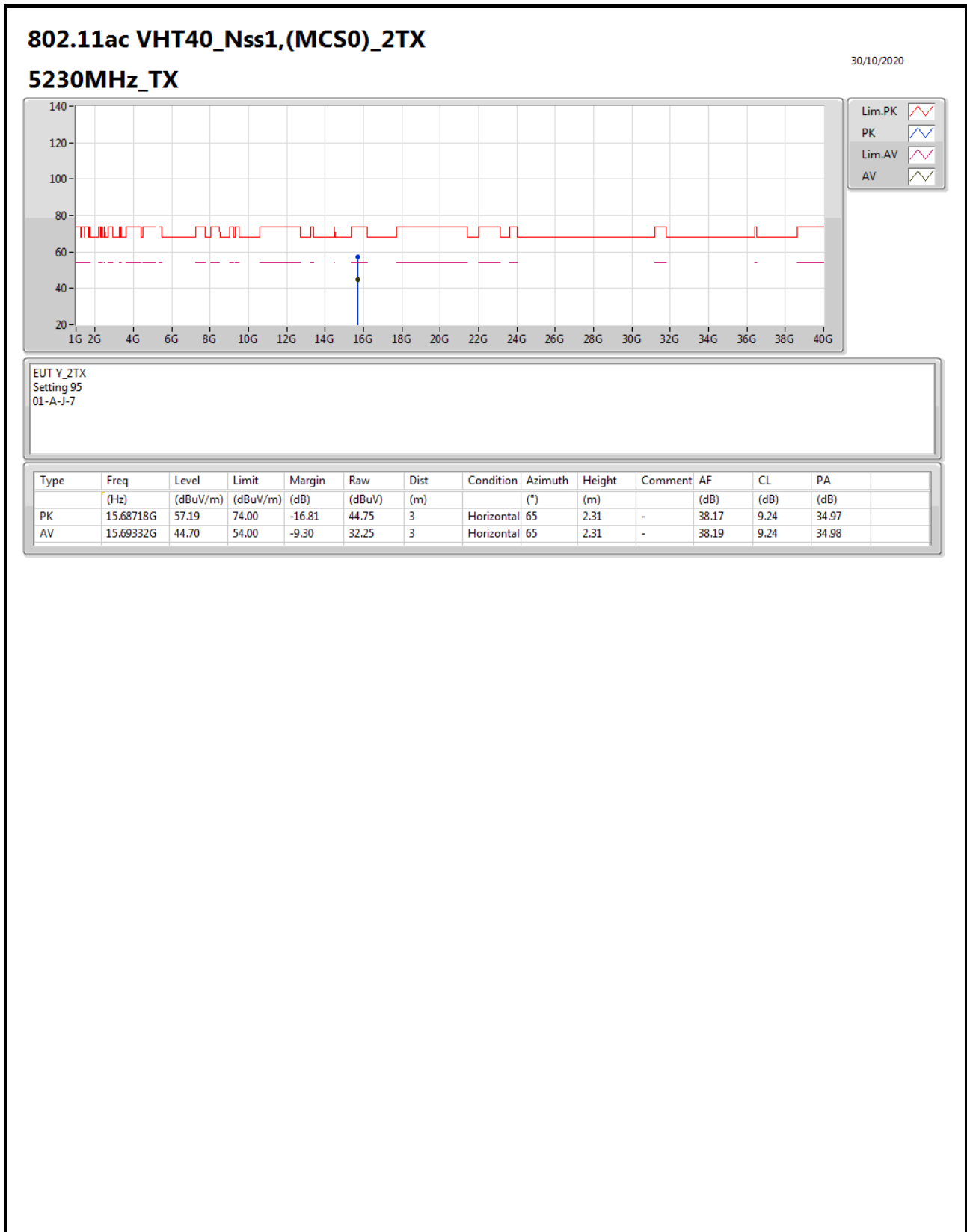


Test Mode: Mode 1





Test Mode: Mode 1



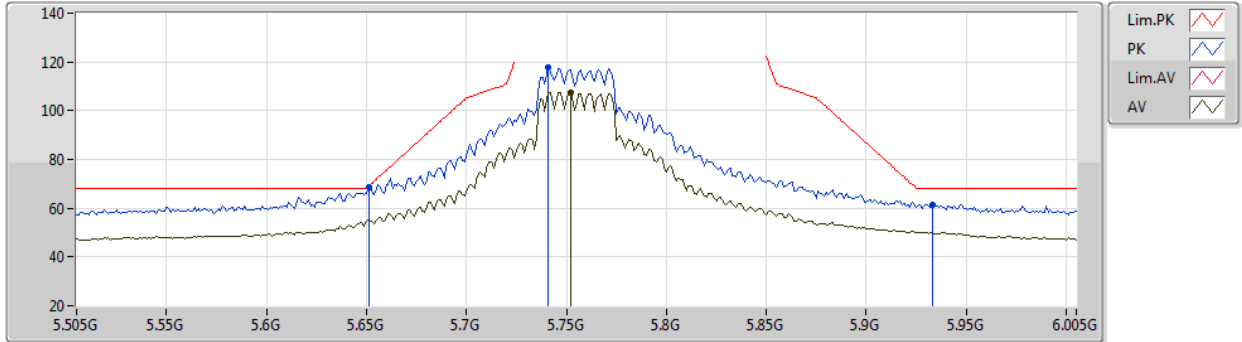


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_3TX

30/10/2020

5755MHz_TX



EUT_Y_2TX
Setting 102
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.651G	68.55	68.94	-0.39	63.62	3	Vertical	67	1.03	-	34.20	5.43	34.70
PK	5.741G	117.89	Inf	-Inf	112.84	3	Vertical	67	1.03	-	34.25	5.47	34.67
AV	5.752G	107.48	Inf	-Inf	102.36	3	Vertical	67	1.03	-	34.30	5.48	34.66
PK	5.933G	61.51	68.20	-6.69	55.55	3	Vertical	67	1.03	-	35.06	5.50	34.60

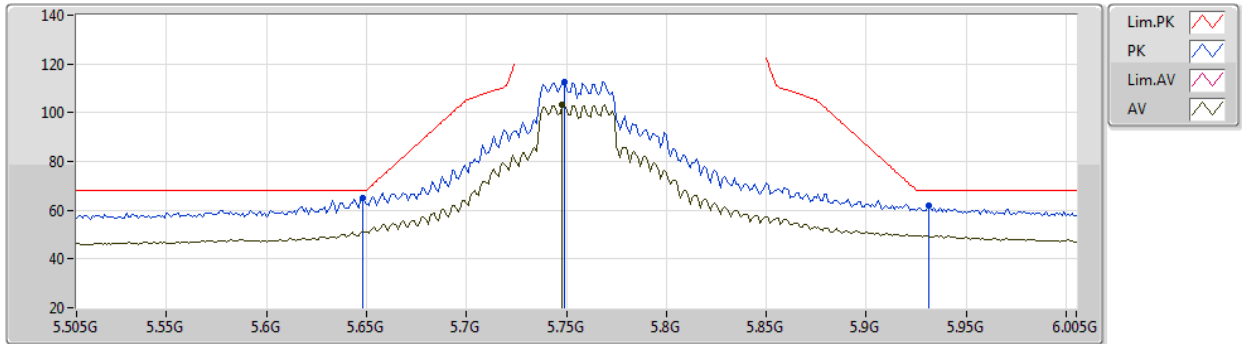


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_3TX

30/10/2020

5755MHz_TX

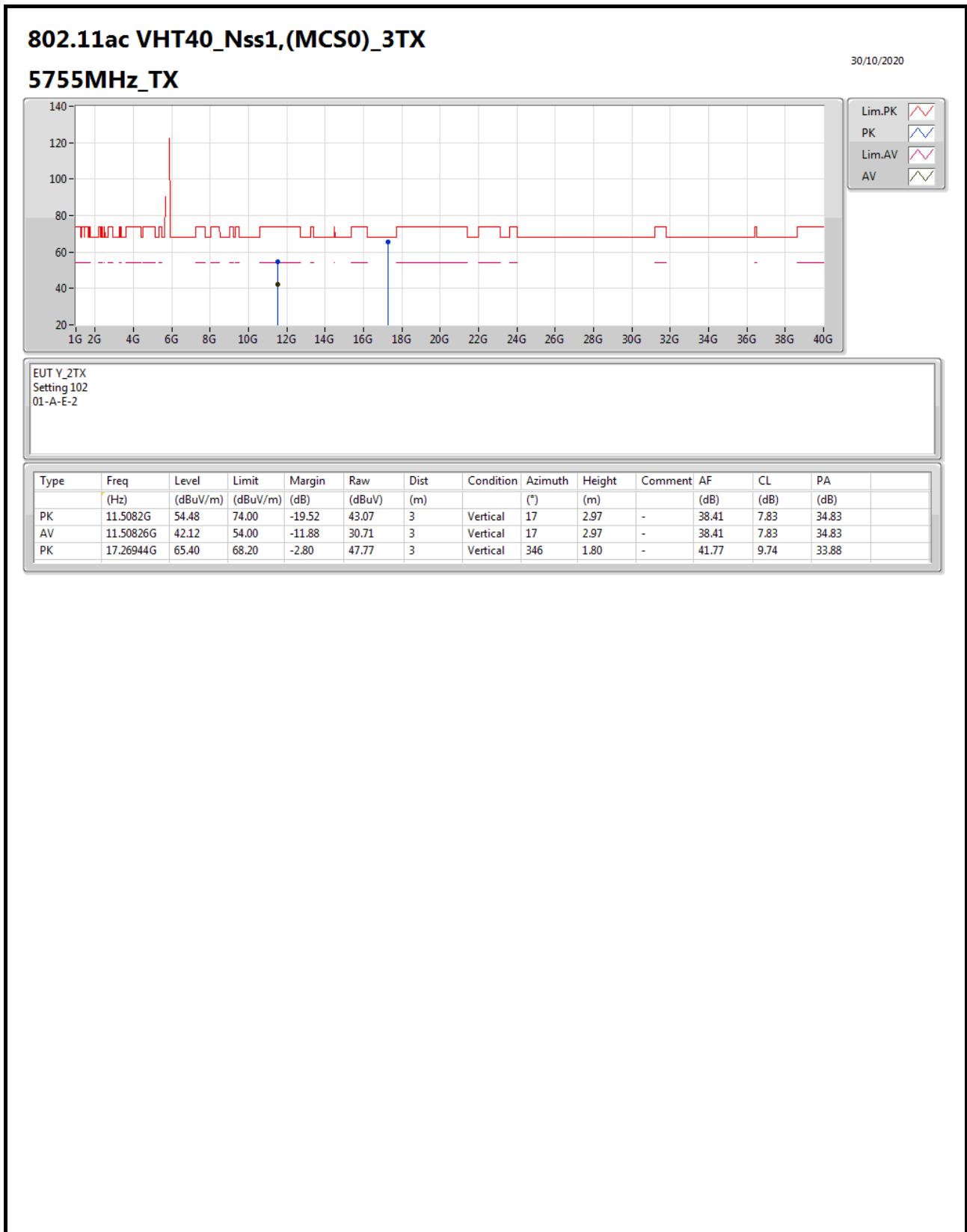


EUT Y_2TX
Setting 102
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.648G	65.20	68.20	-3.00	60.29	3	Horizontal	284	1.62	-	34.19	5.42	34.70
PK	5.749G	112.48	Inf	-Inf	107.39	3	Horizontal	284	1.62	-	34.29	5.47	34.67
AV	5.748G	103.42	Inf	-Inf	98.33	3	Horizontal	284	1.62	-	34.29	5.47	34.67
PK	5.931G	61.74	68.20	-6.46	55.79	3	Horizontal	284	1.62	-	35.05	5.50	34.60

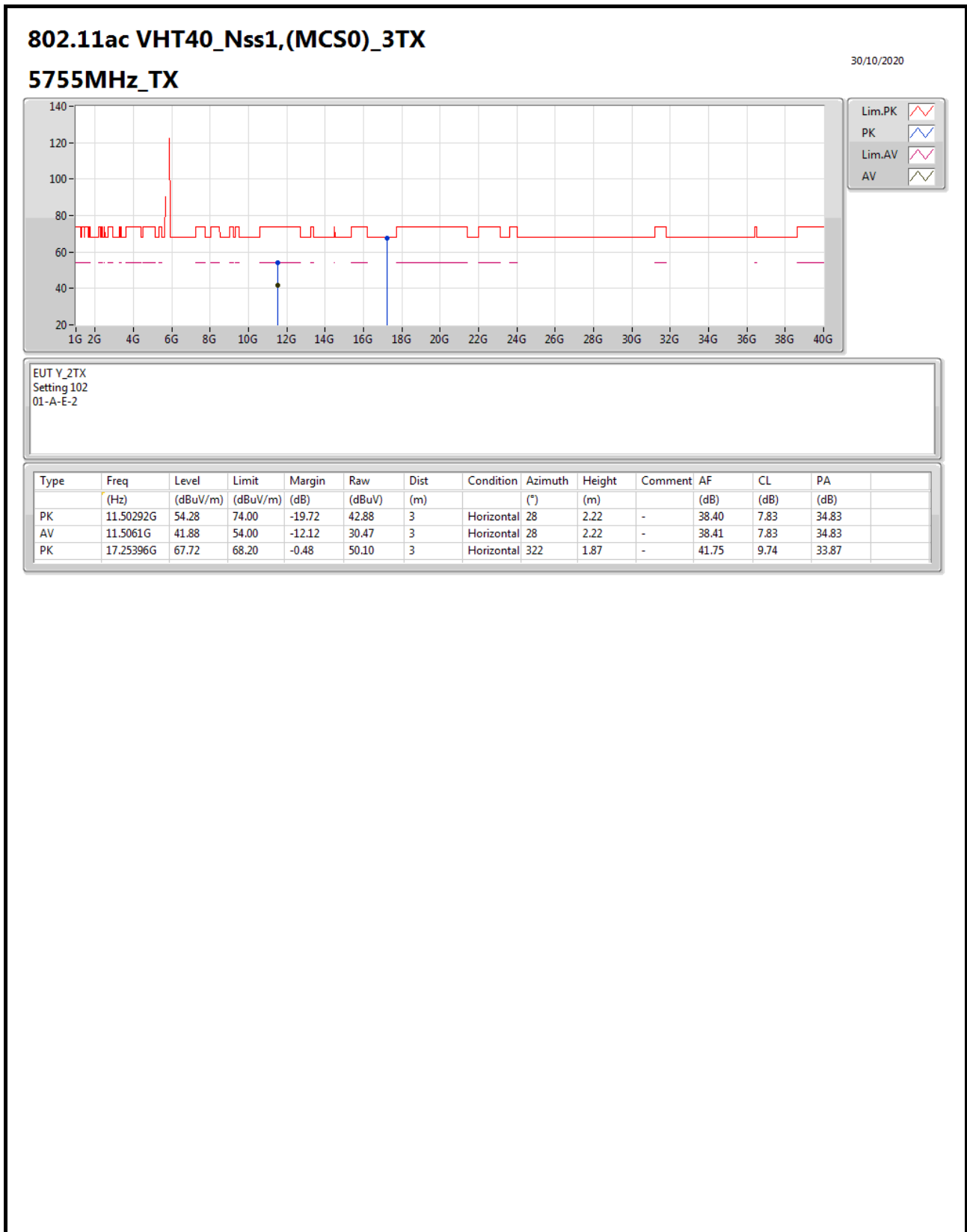


Test Mode: Mode 1





Test Mode: Mode 1



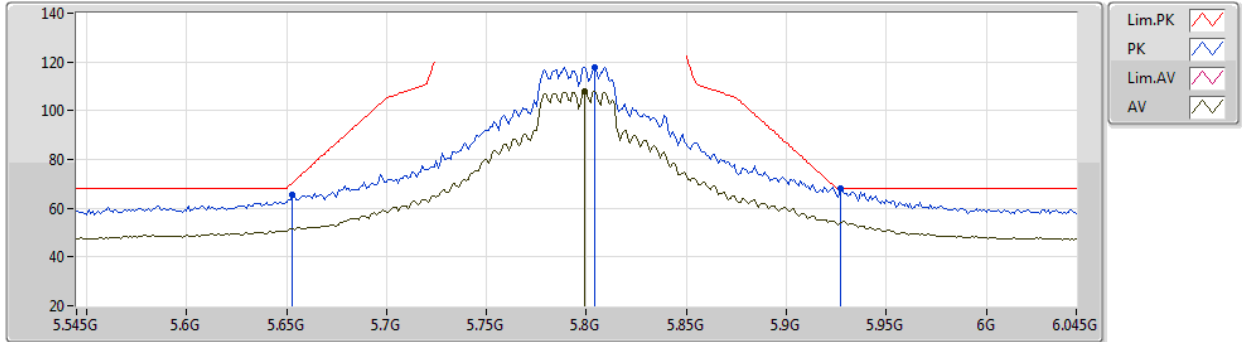


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_3TX

30/10/2020

5795MHz_TX



EUT Y_2TX
Setting 104
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.653G	65.54	70.42	-4.88	60.62	3	Vertical	96	1.00	-	34.19	5.43	34.70
PK	5.804G	117.88	Inf	-Inf	112.69	3	Vertical	96	1.00	-	34.33	5.50	34.64
AV	5.799G	107.94	Inf	-Inf	102.79	3	Vertical	96	1.00	-	34.30	5.50	34.65
PK	5.927G	68.13	68.20	-0.07	62.21	3	Vertical	96	1.00	-	35.02	5.50	34.60

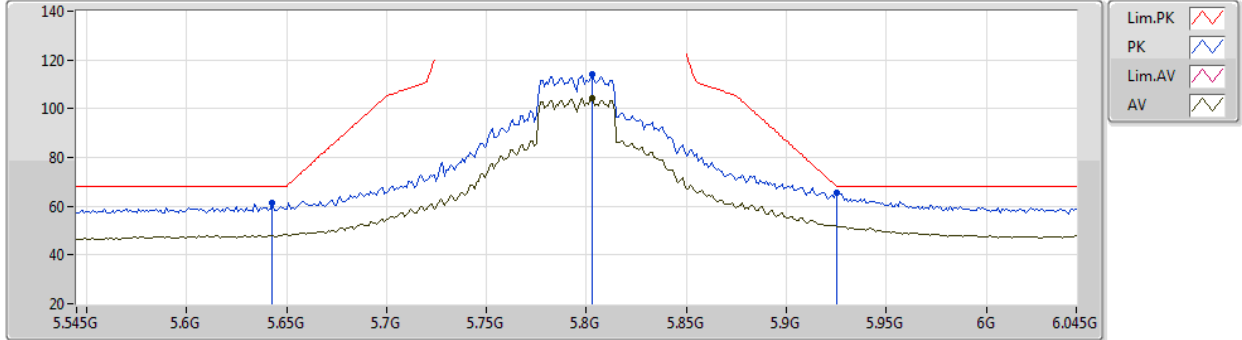


Test Mode: Mode 1

802.11ac VHT40_Nss1,(MCS0)_3TX

30/10/2020

5795MHz_TX

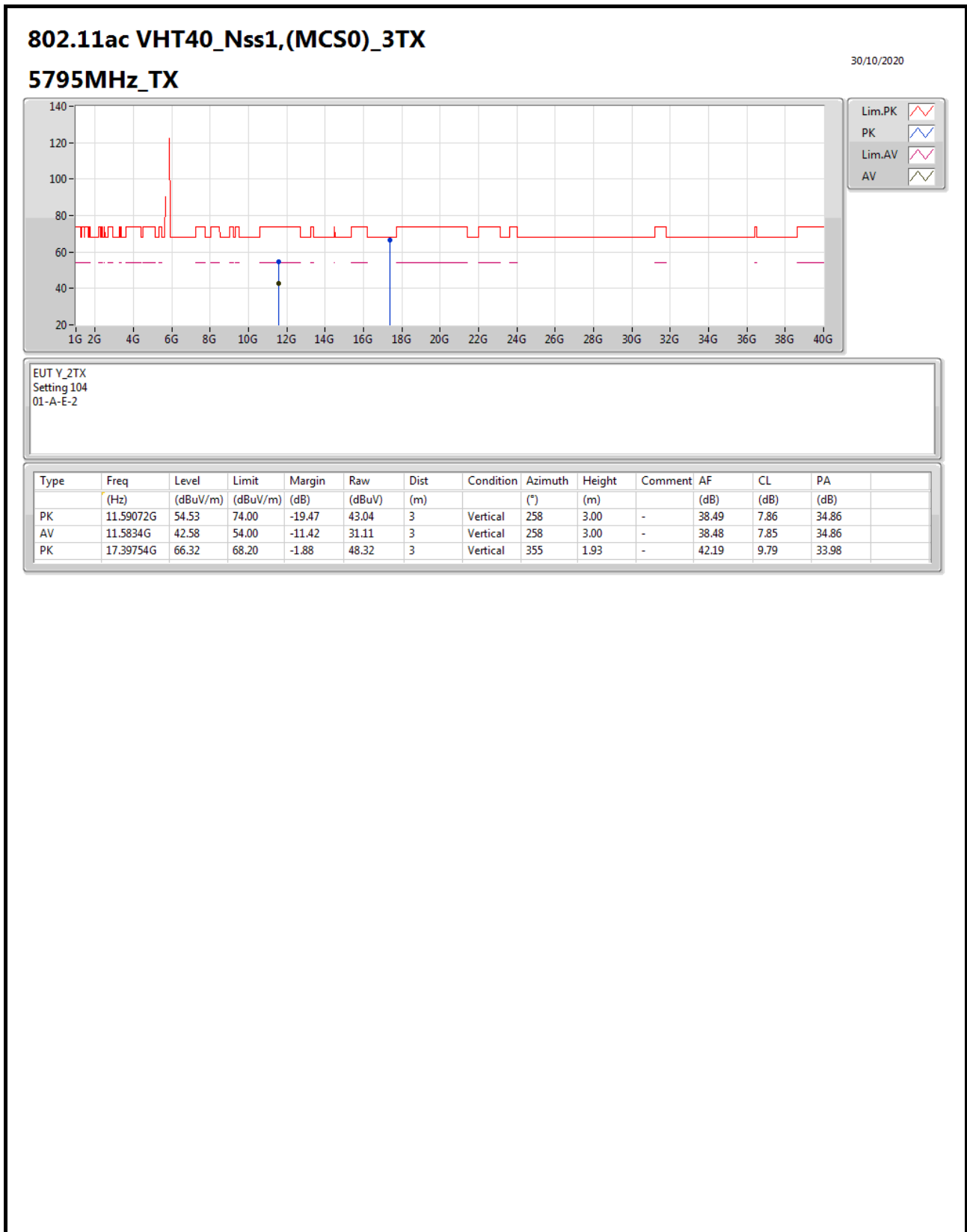


EUT_Y_2TX
Setting 104
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.643G	61.59	68.20	-6.61	56.71	3	Horizontal	142	1.55	-	34.17	5.42	34.71
PK	5.803G	114.02	Inf	-Inf	108.84	3	Horizontal	142	1.55	-	34.32	5.50	34.64
AV	5.803G	104.32	Inf	-Inf	99.14	3	Horizontal	142	1.55	-	34.32	5.50	34.64
PK	5.925G	65.69	68.20	-2.51	59.79	3	Horizontal	142	1.55	-	35.00	5.50	34.60

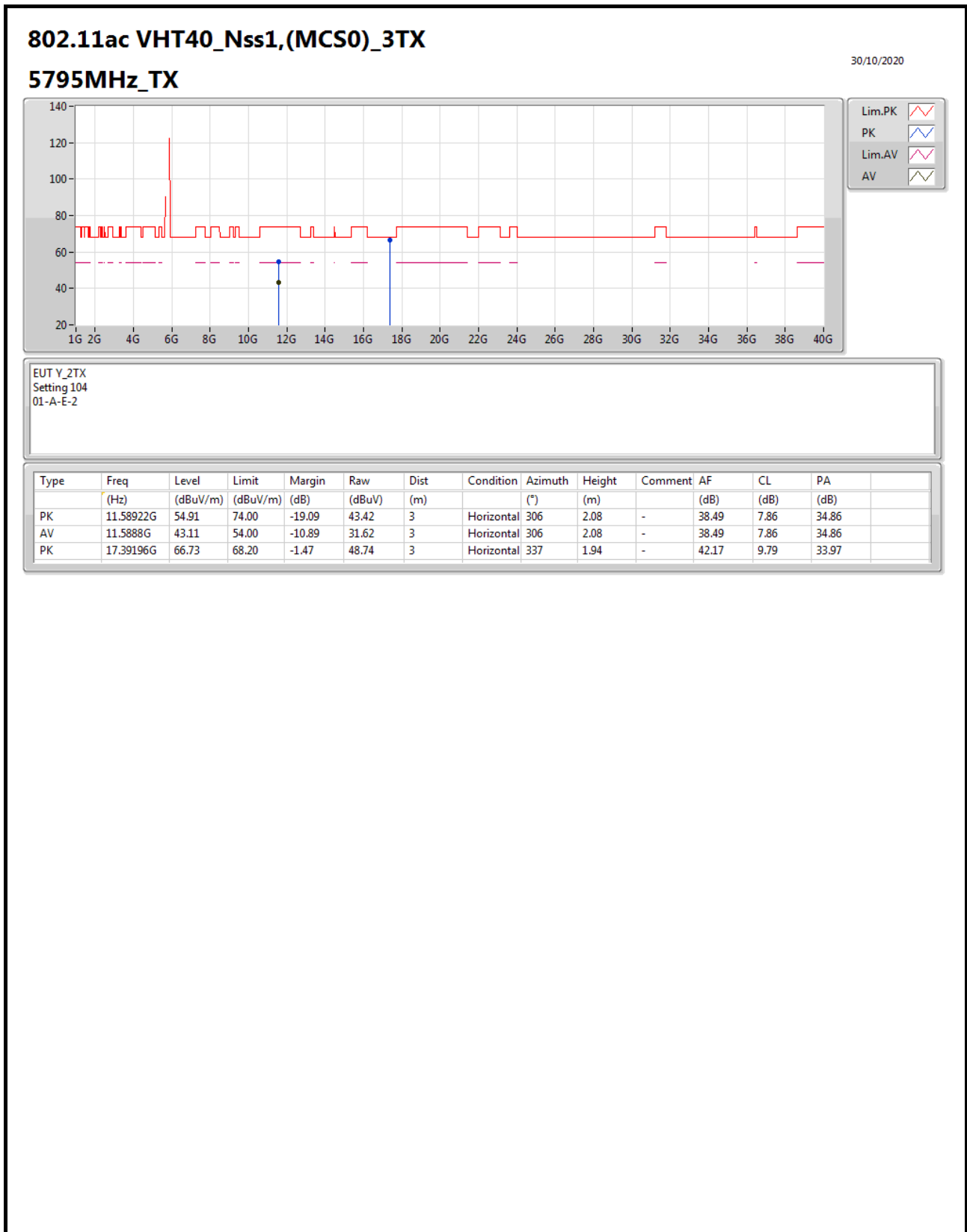


Test Mode: Mode 1





Test Mode: Mode 1



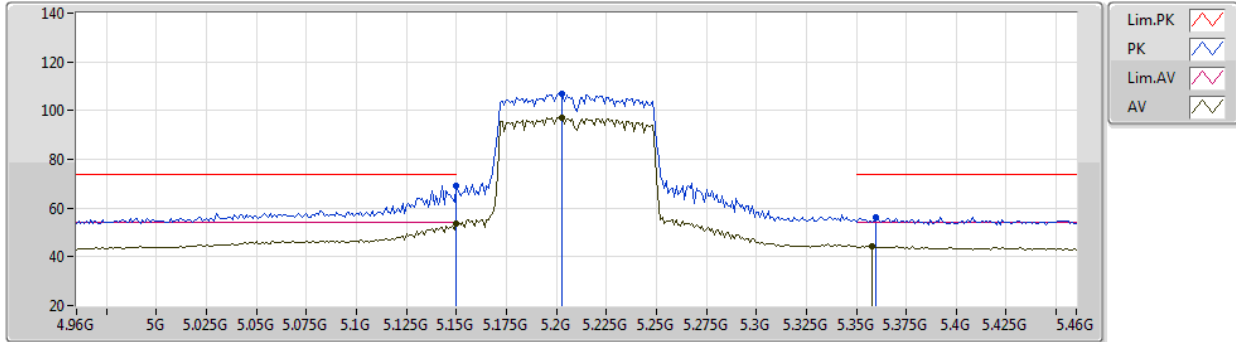


Test Mode: Mode 1

802.11ac VHT80_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX



EUT_Y_2TX
Setting 72
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	69.32	74.00	-4.68	66.98	3	Vertical	221	1.77	-	31.80	5.17	34.63
AV	5.15G	53.61	54.00	-0.39	51.27	3	Vertical	221	1.77	-	31.80	5.17	34.63
PK	5.203G	106.79	Inf	-Inf	104.65	3	Vertical	221	1.77	-	31.59	5.20	34.65
AV	5.203G	97.22	Inf	-Inf	95.08	3	Vertical	221	1.77	-	31.59	5.20	34.65
PK	5.36G	56.23	74.00	-17.77	54.20	3	Vertical	221	1.77	-	31.38	5.36	34.71
AV	5.358G	44.36	54.00	-9.64	42.35	3	Vertical	221	1.77	-	31.36	5.36	34.71

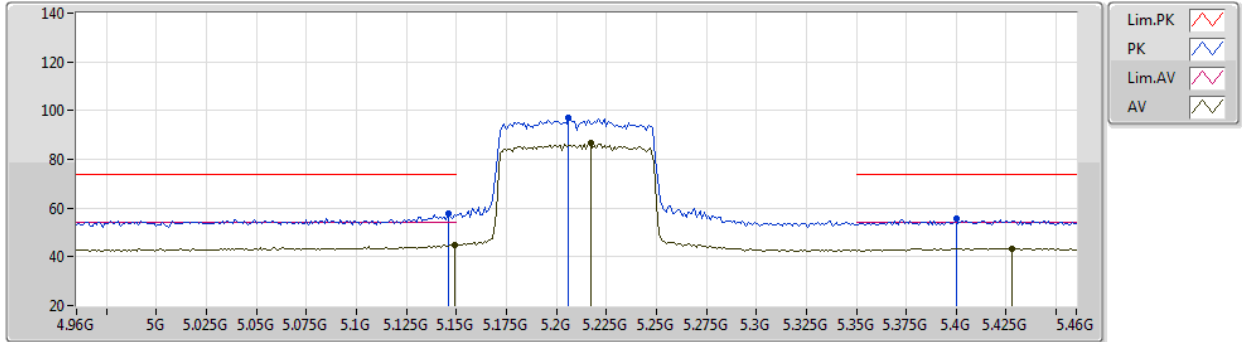


Test Mode: Mode 1

802.11ac VHT80_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX

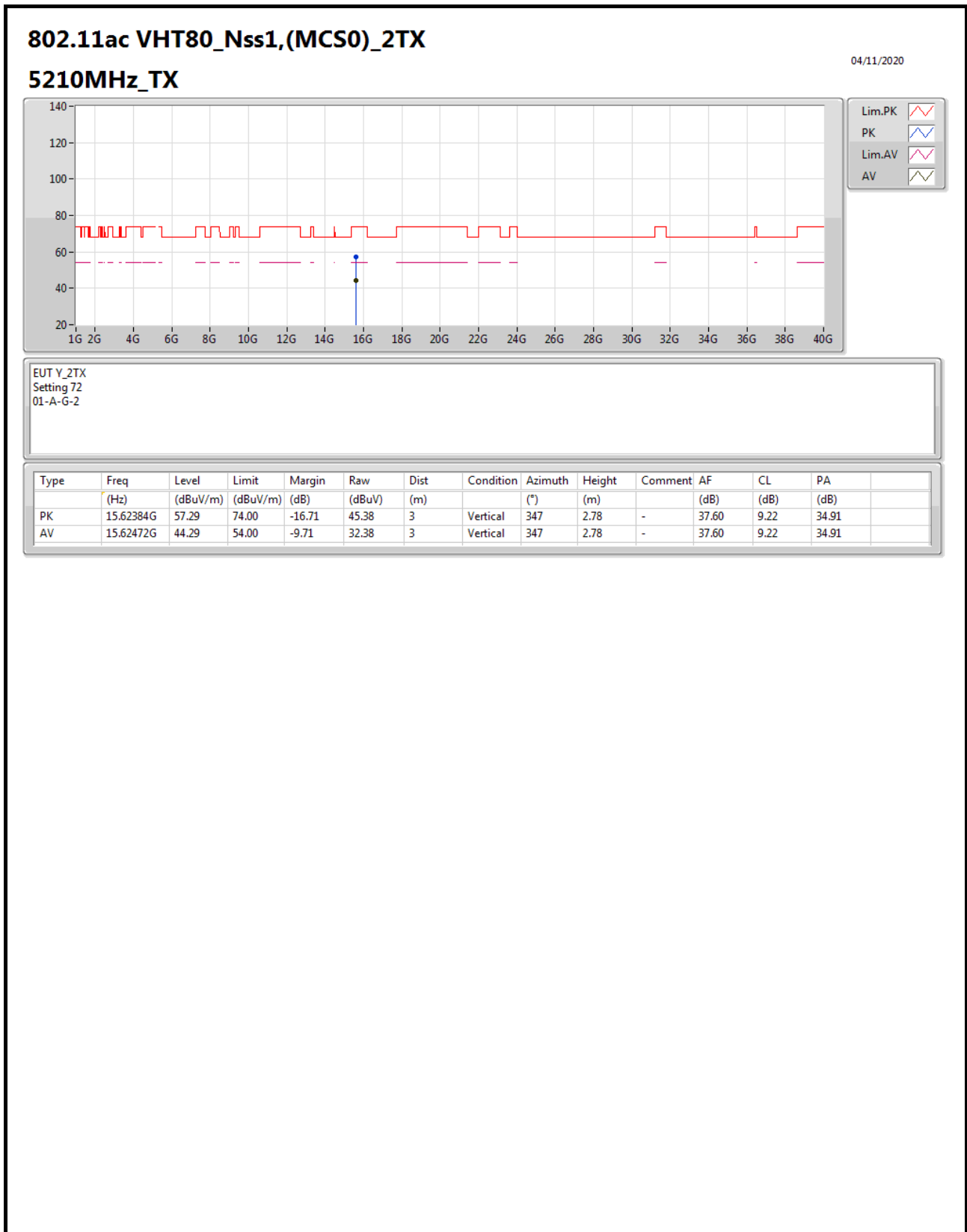


EUT_Y_2TX
Setting 72
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.146G	57.81	74.00	-16.19	55.45	3	Horizontal	69	1.80	-	31.82	5.17	34.63
AV	5.149G	44.94	54.00	-9.06	42.60	3	Horizontal	69	1.80	-	31.80	5.17	34.63
PK	5.206G	97.03	Inf	-Inf	94.89	3	Horizontal	69	1.80	-	31.58	5.21	34.65
AV	5.217G	86.51	Inf	-Inf	84.42	3	Horizontal	69	1.80	-	31.53	5.22	34.66
PK	5.4G	55.68	74.00	-18.32	53.30	3	Horizontal	69	1.80	-	31.70	5.40	34.72
AV	5.428G	43.50	54.00	-10.50	41.13	3	Horizontal	69	1.80	-	31.70	5.40	34.73

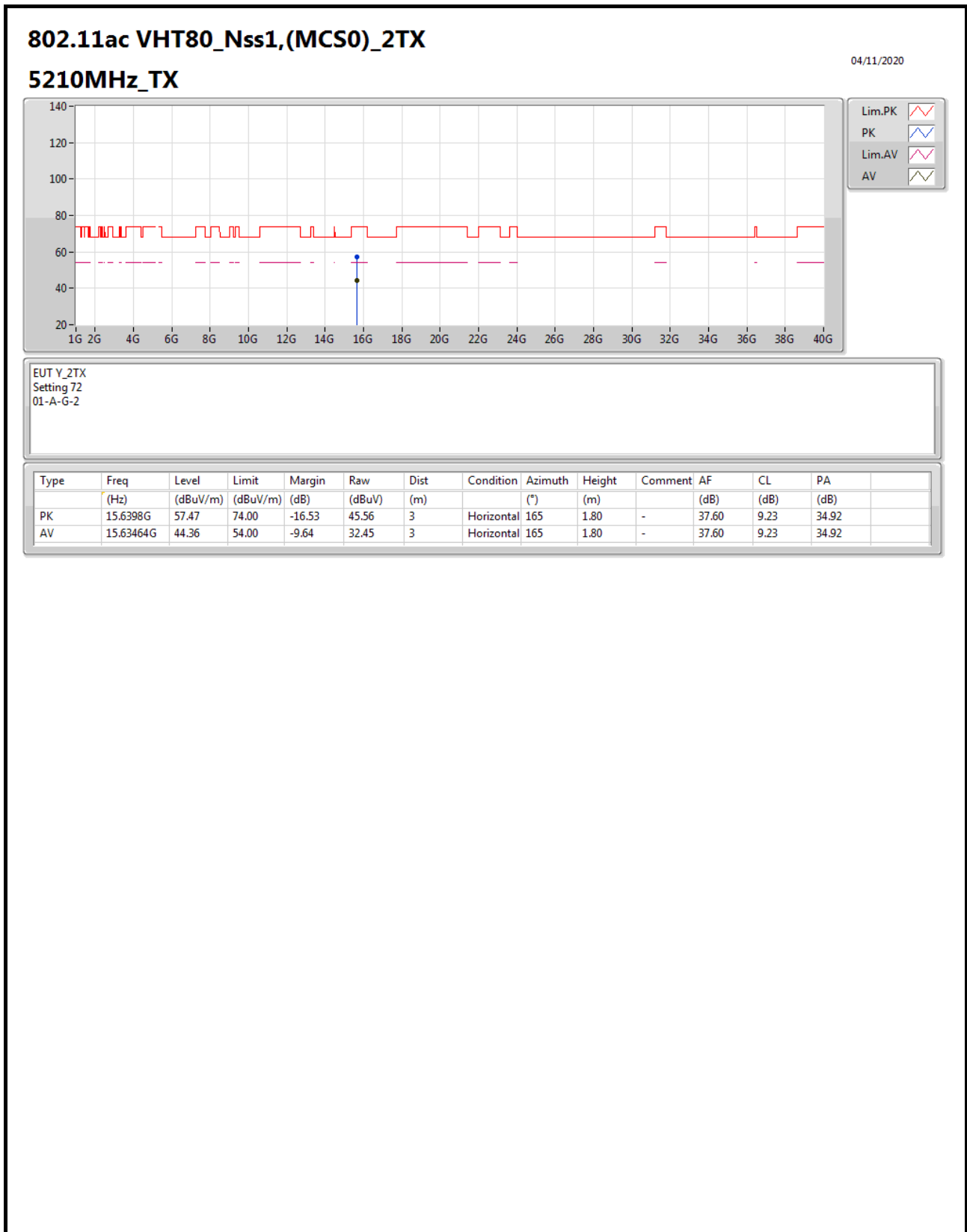


Test Mode: Mode 1





Test Mode: Mode 1



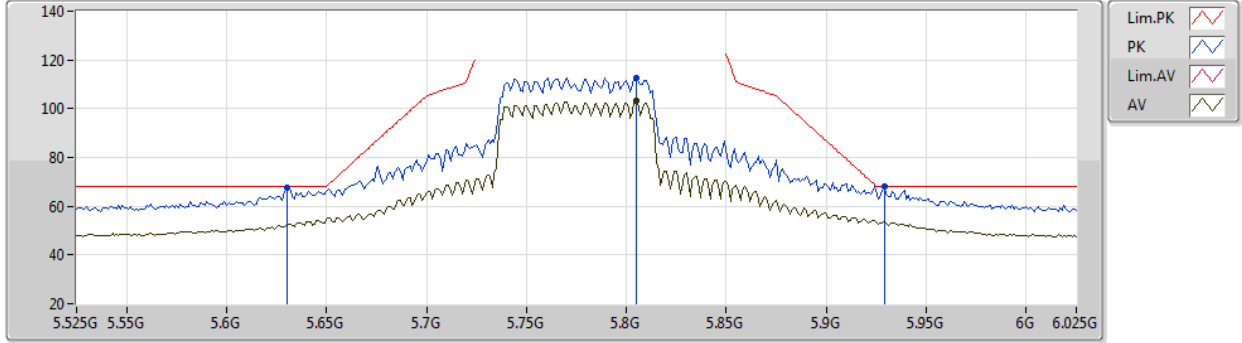


Test Mode: Mode 1

802.11ac VHT80_Nss1,(MCS0)_3TX

30/10/2020

5775MHz_TX



EUT_Y_2TX
Setting 91
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.63G	67.68	68.20	-0.52	62.85	3	Vertical	319	1.14	-	34.12	5.42	34.71
PK	5.805G	112.71	Inf	-Inf	107.51	3	Vertical	319	1.14	-	34.34	5.50	34.64
AV	5.805G	103.04	Inf	-Inf	97.84	3	Vertical	319	1.14	-	34.34	5.50	34.64
PK	5.929G	68.08	68.20	-0.12	62.15	3	Vertical	319	1.14	-	35.03	5.50	34.60

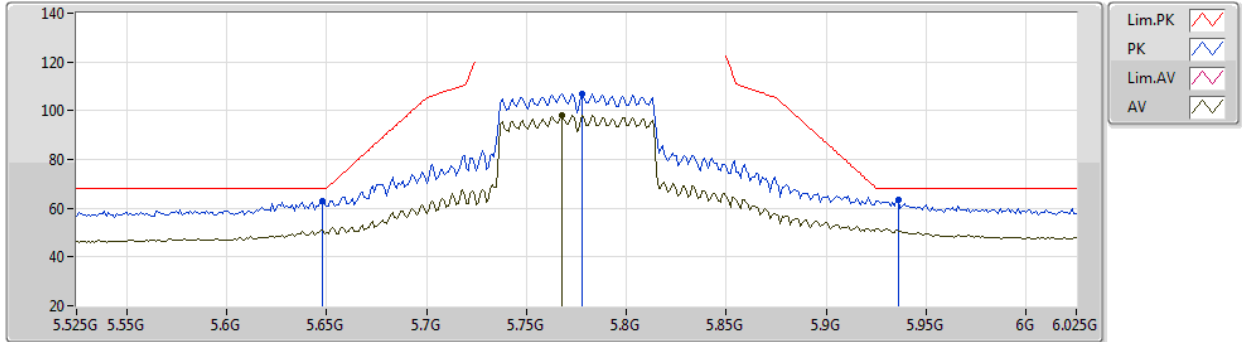


Test Mode: Mode 1

802.11ac VHT80_Nss1,(MCS0)_3TX

30/10/2020

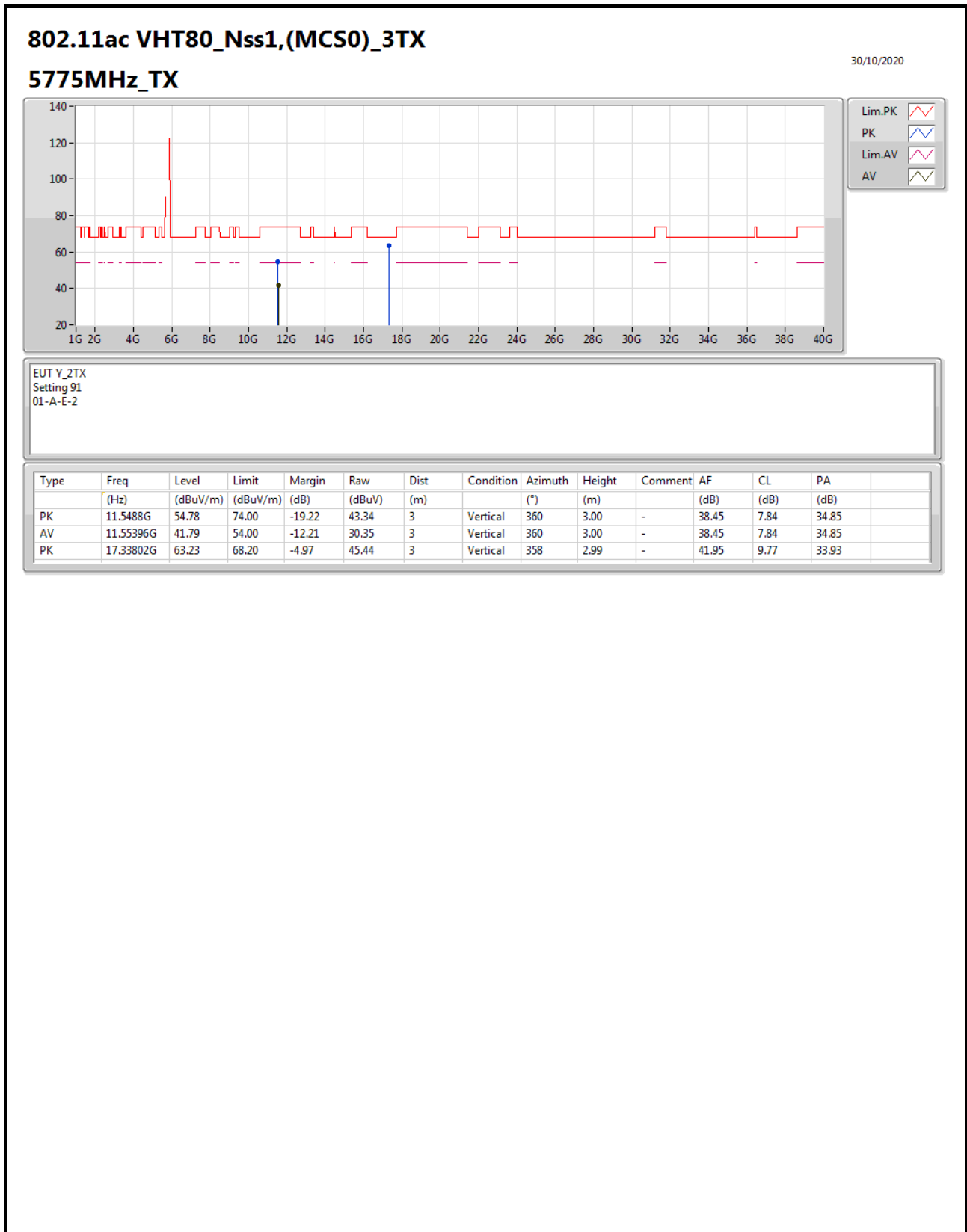
5775MHz_TX



EUT_Y_2TX
Setting 91
01-A-E-2-10

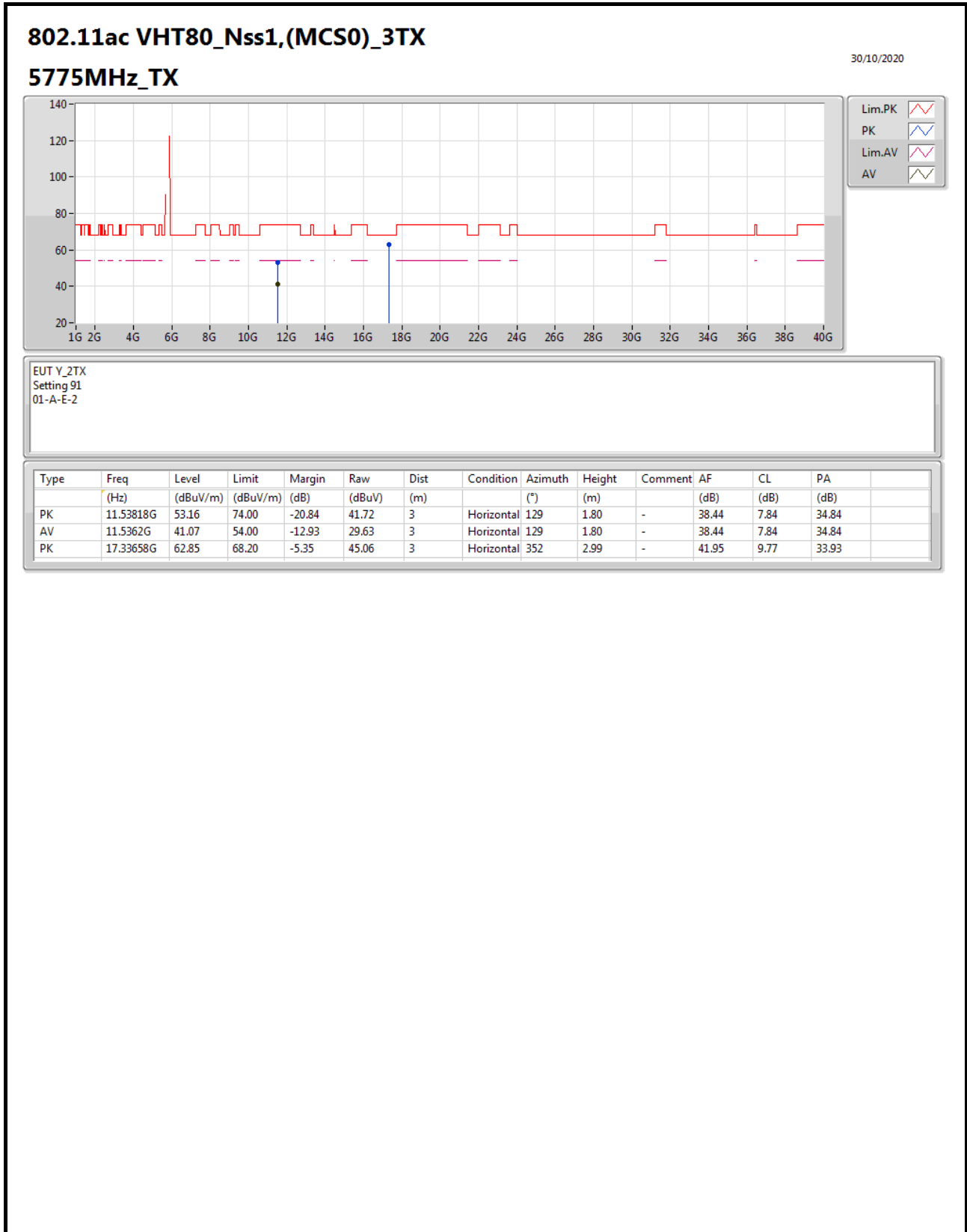
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.648G	62.98	68.20	-5.22	58.07	3	Horizontal	284	2.53	-	34.19	5.42	34.70
PK	5.778G	107.10	Inf	-Inf	101.96	3	Horizontal	284	2.53	-	34.30	5.49	34.65
AV	5.768G	98.35	Inf	-Inf	93.23	3	Horizontal	284	2.53	-	34.30	5.48	34.66
PK	5.936G	63.38	68.20	-4.82	57.38	3	Horizontal	284	2.53	-	35.09	5.50	34.59

Test Mode: Mode 1





Test Mode: Mode 1



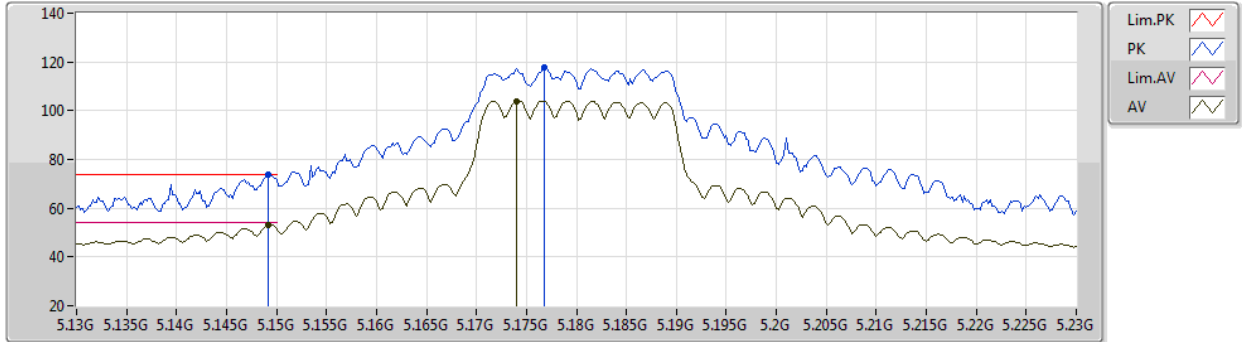


Test Mode: Mode 1

802.11ax HEW20_Nss1,(MCS0)_2TX

04/11/2020

5180MHz_TX

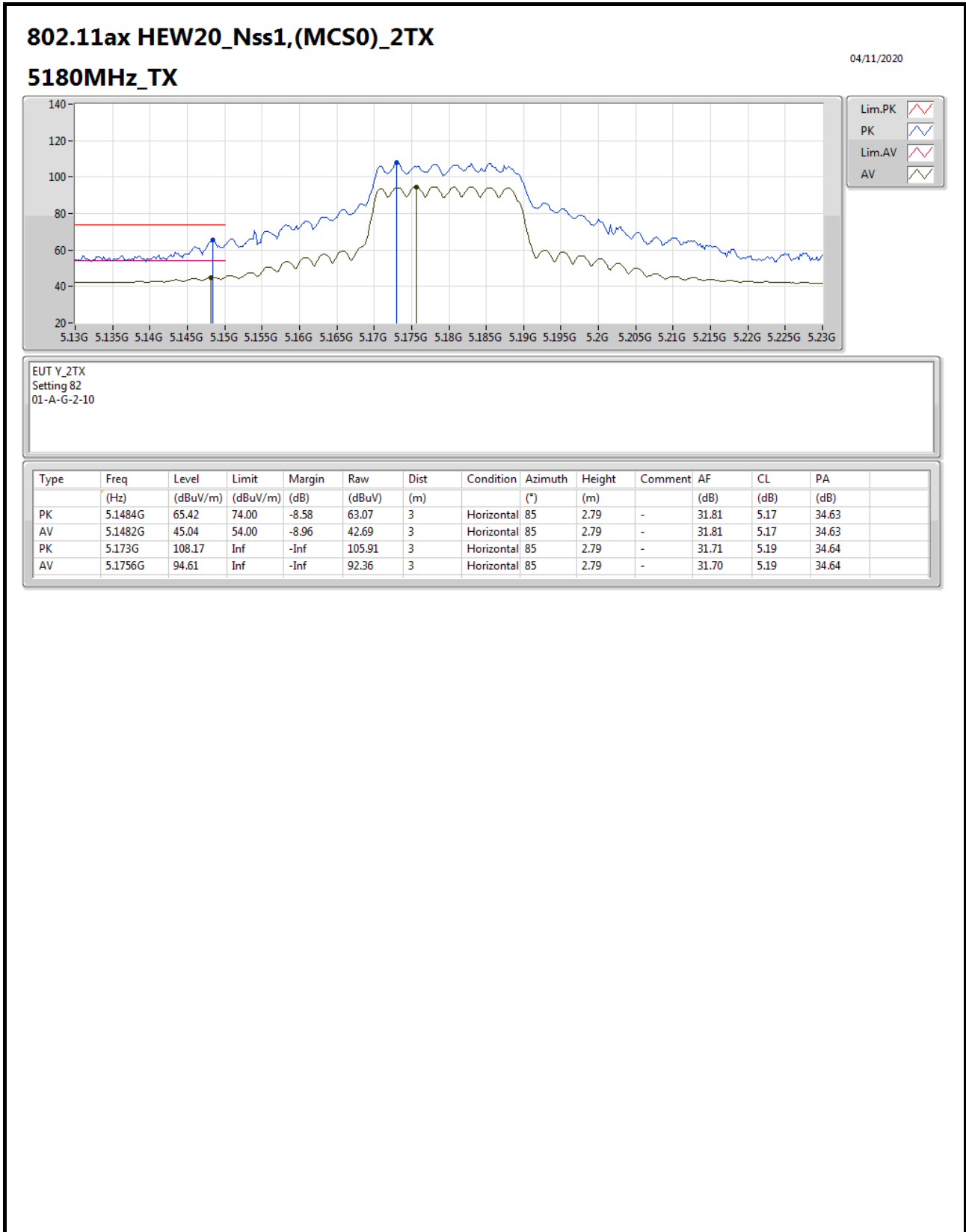


EUT Y_2TX
Setting 82
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	73.71	74.00	-0.29	71.37	3	Vertical	51	1.74	-	31.80	5.17	34.63
AV	5.1492G	53.27	54.00	-0.73	50.93	3	Vertical	51	1.74	-	31.80	5.17	34.63
PK	5.1768G	117.98	Inf	-Inf	115.74	3	Vertical	51	1.74	-	31.69	5.19	34.64
AV	5.174G	103.97	Inf	-Inf	101.72	3	Vertical	51	1.74	-	31.70	5.19	34.64

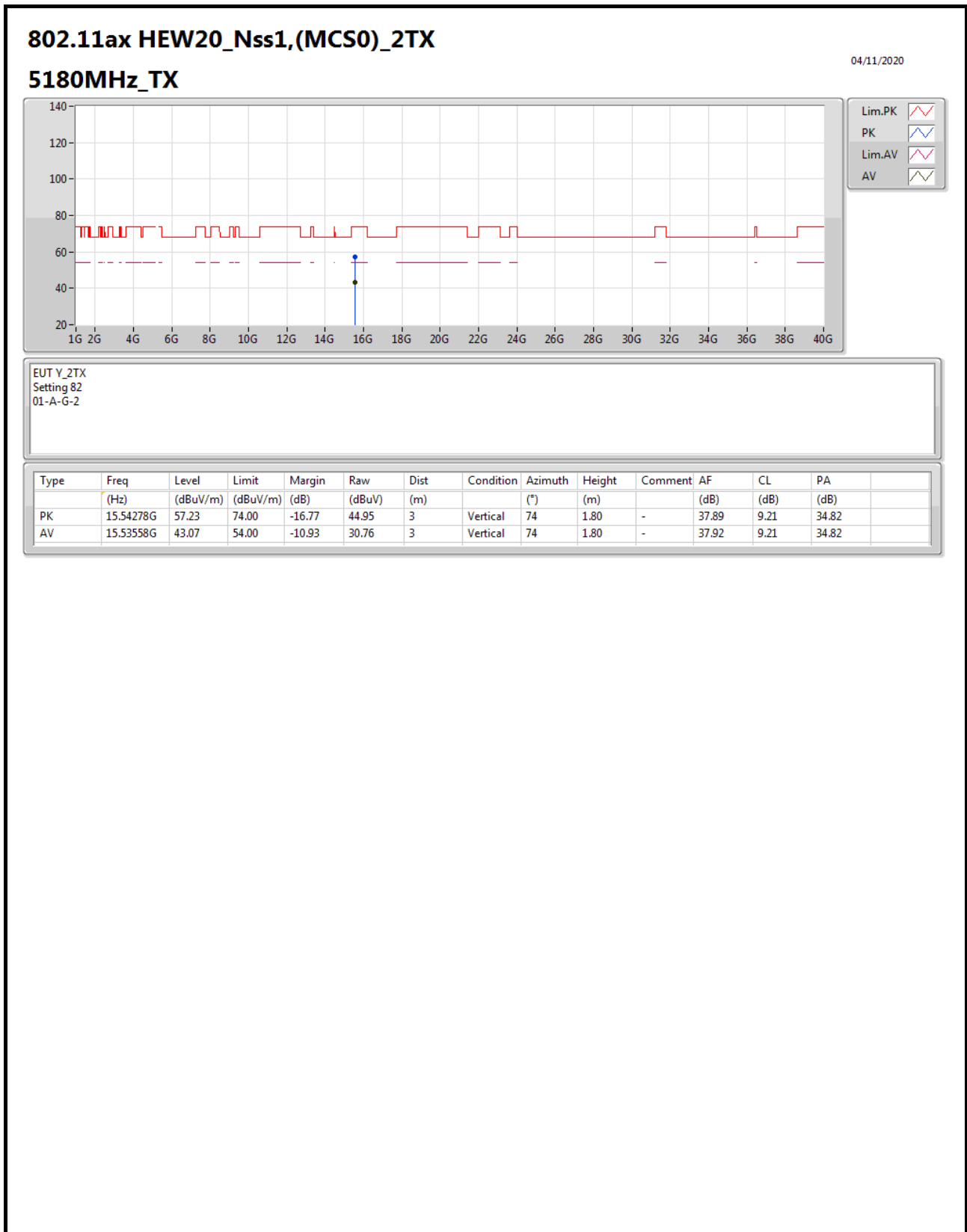


Test Mode: Mode 1



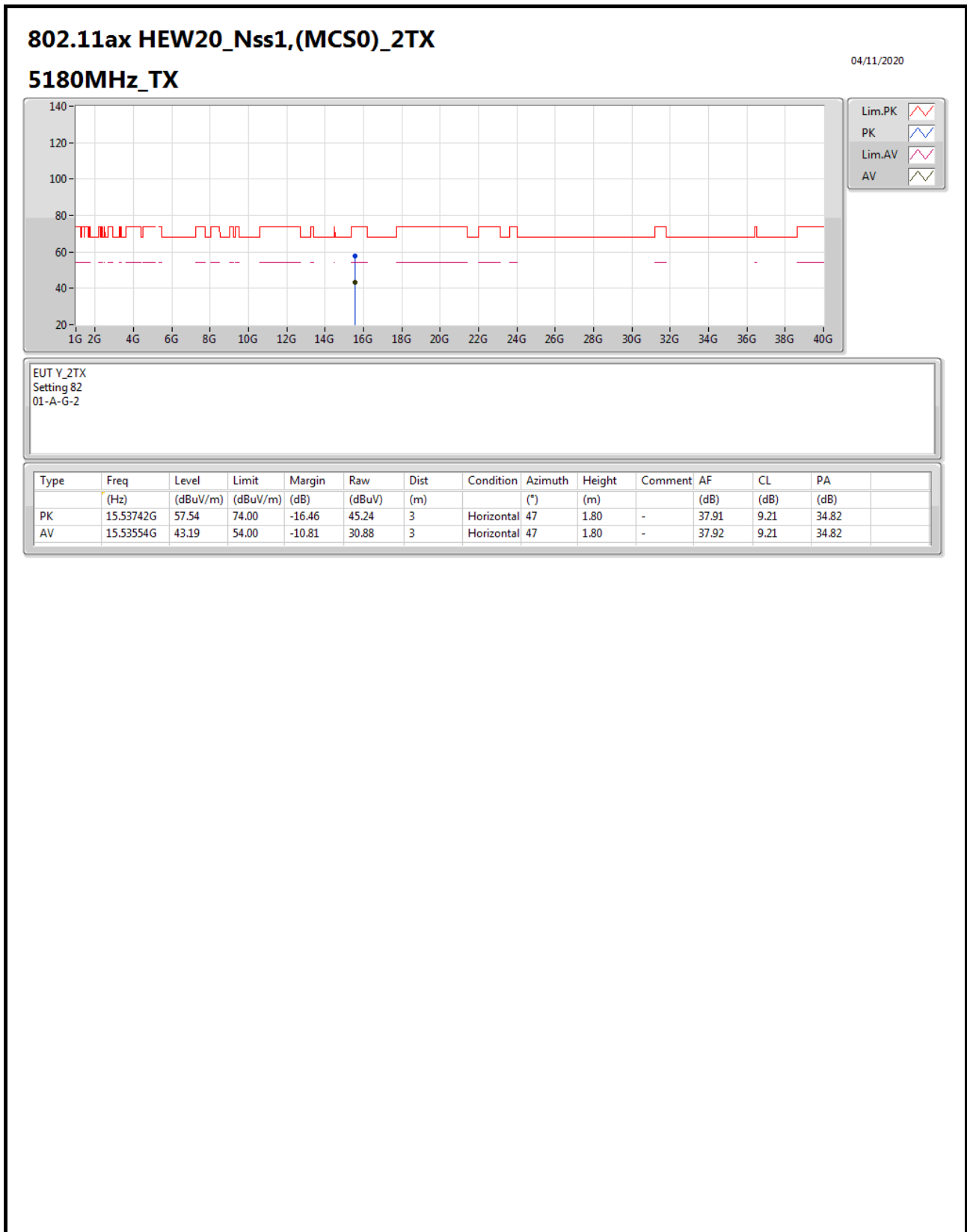


Test Mode: Mode 1





Test Mode: Mode 1



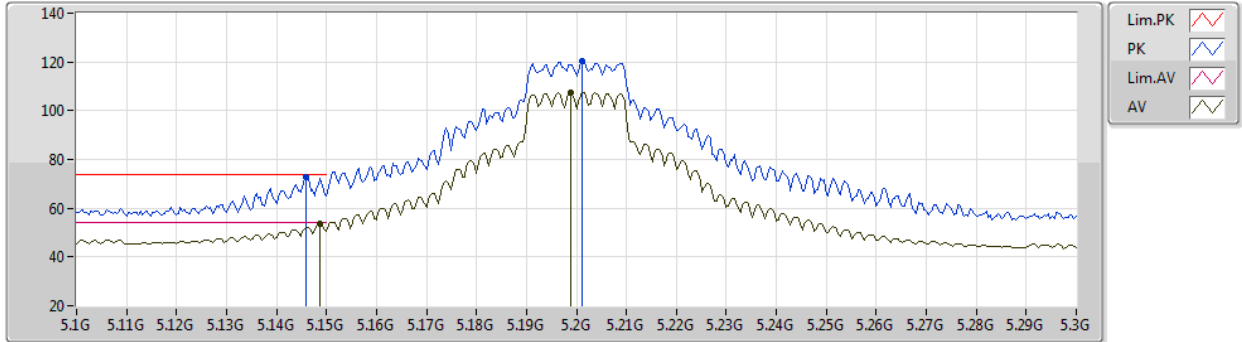


Test Mode: Mode 1

802.11ax HEW20_Nss1,(MCS0)_2TX

04/11/2020

5200MHz_TX

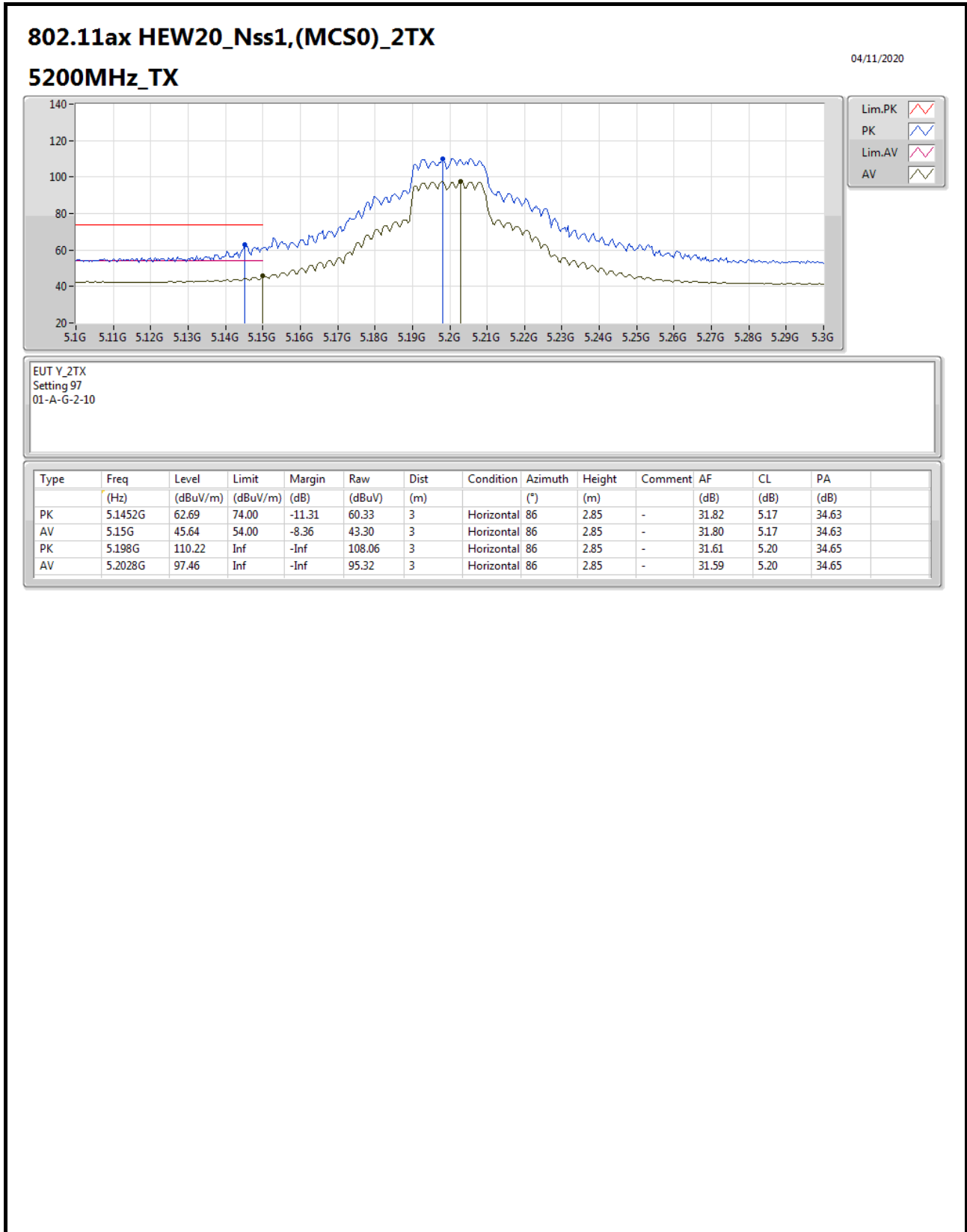


EUT_Y_2TX
Setting 97
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.146G	72.71	74.00	-1.29	70.35	3	Vertical	54	1.78	-	31.82	5.17	34.63
AV	5.1488G	53.69	54.00	-0.31	51.35	3	Vertical	54	1.78	-	31.80	5.17	34.63
PK	5.2012G	120.54	Inf	-Inf	118.39	3	Vertical	54	1.78	-	31.60	5.20	34.65
AV	5.1988G	107.31	Inf	-Inf	105.16	3	Vertical	54	1.78	-	31.60	5.20	34.65

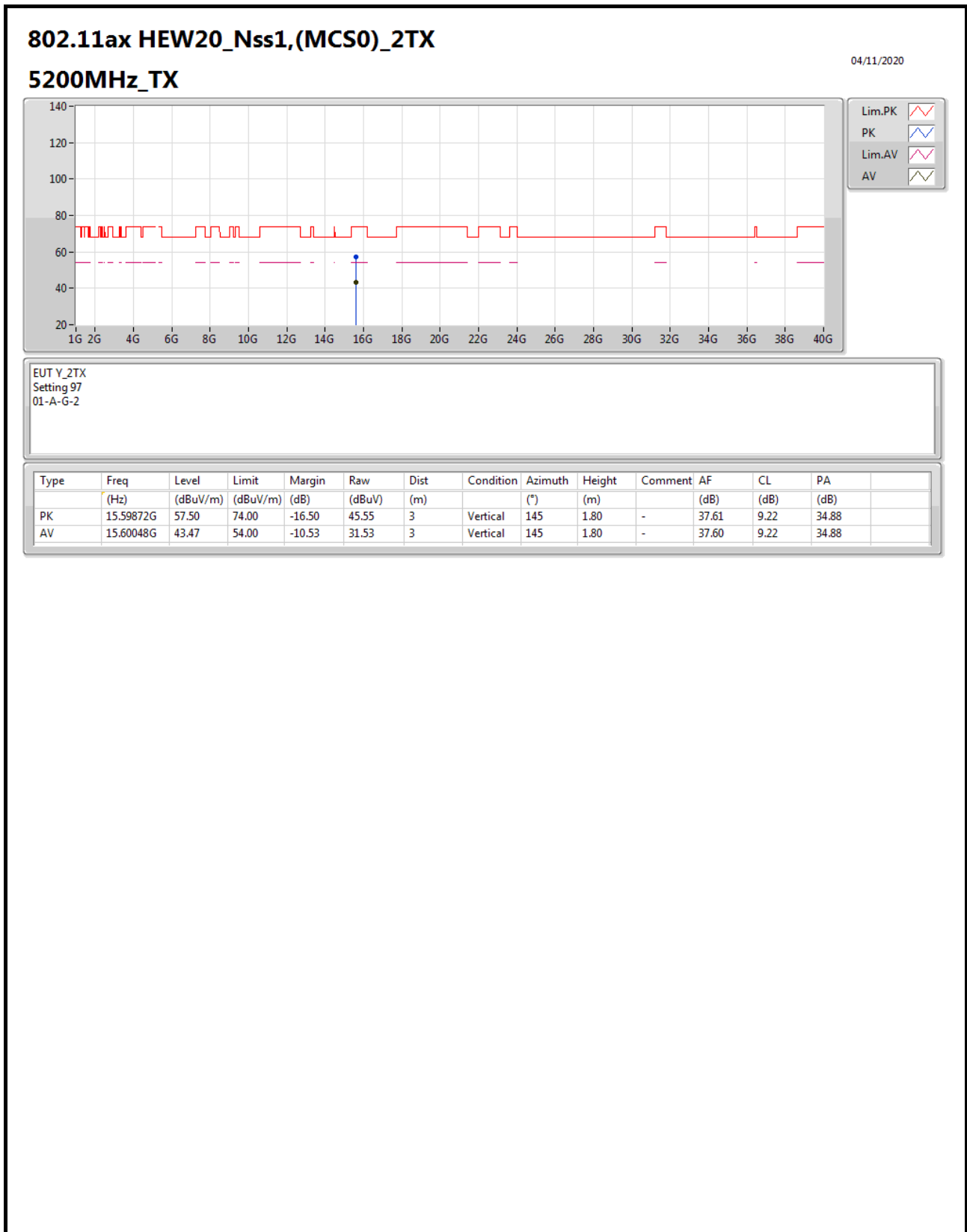


Test Mode: Mode 1



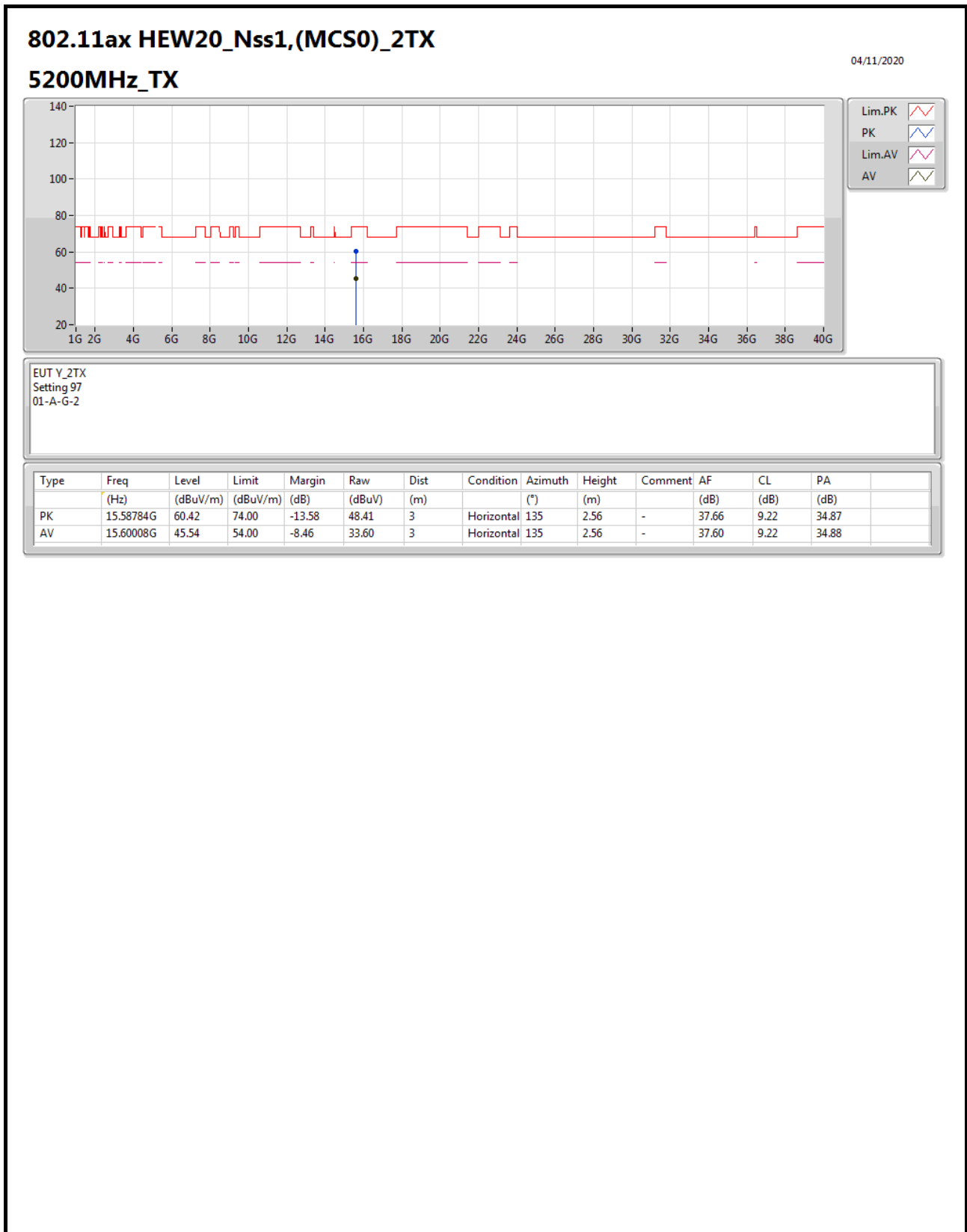


Test Mode: Mode 1





Test Mode: Mode 1



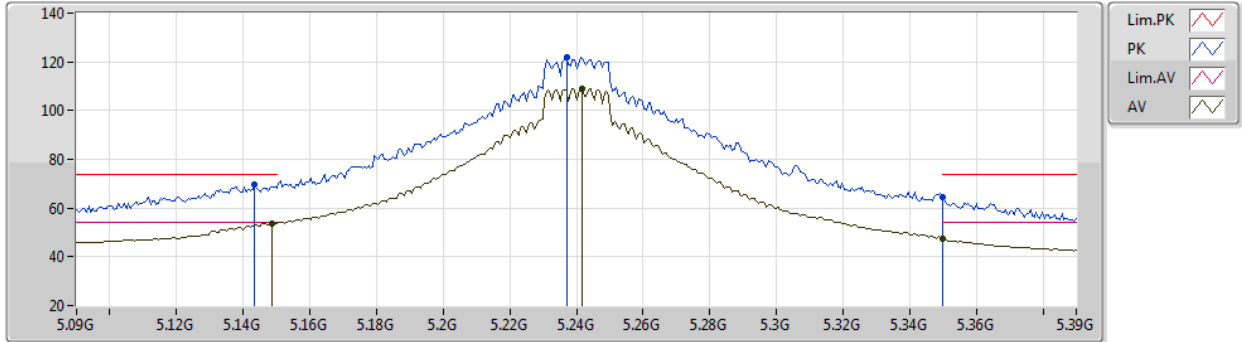


Test Mode: Mode 1

802.11ax HEW20_Nss1,(MCS0)_2TX

04/11/2020

5240MHz_TX



EUT_Y_2TX
Setting 103
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1434G	69.88	74.00	-4.12	67.51	3	Vertical	54	1.80	-	31.83	5.17	34.63
AV	5.1488G	53.84	54.00	-0.16	51.50	3	Vertical	54	1.80	-	31.80	5.17	34.63
PK	5.237G	121.67	Inf	-Inf	119.65	3	Vertical	54	1.80	-	31.45	5.24	34.67
AV	5.2418G	108.97	Inf	-Inf	106.97	3	Vertical	54	1.80	-	31.43	5.24	34.67
PK	5.35G	64.61	74.00	-9.39	62.67	3	Vertical	54	1.80	-	31.30	5.35	34.71
AV	5.35G	47.53	54.00	-6.47	45.59	3	Vertical	54	1.80	-	31.30	5.35	34.71

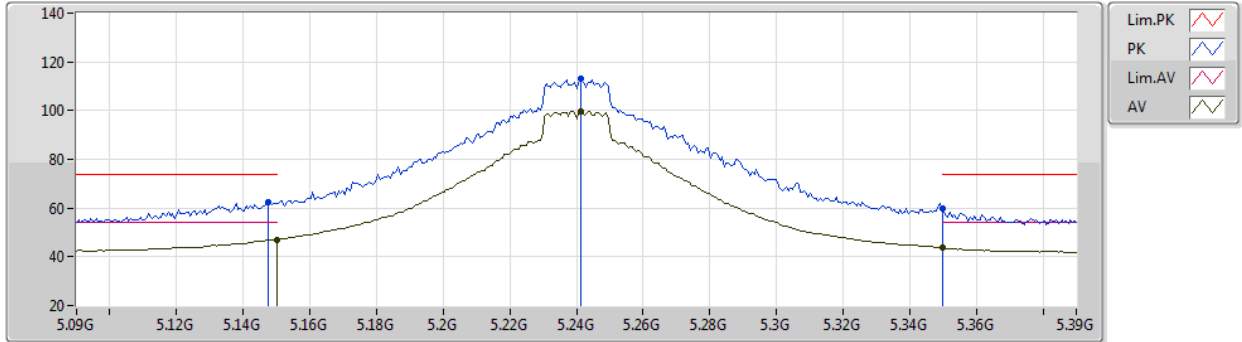


Test Mode: Mode 1

802.11ax HEW20_Nss1,(MCS0)_2TX

04/11/2020

5240MHz_TX

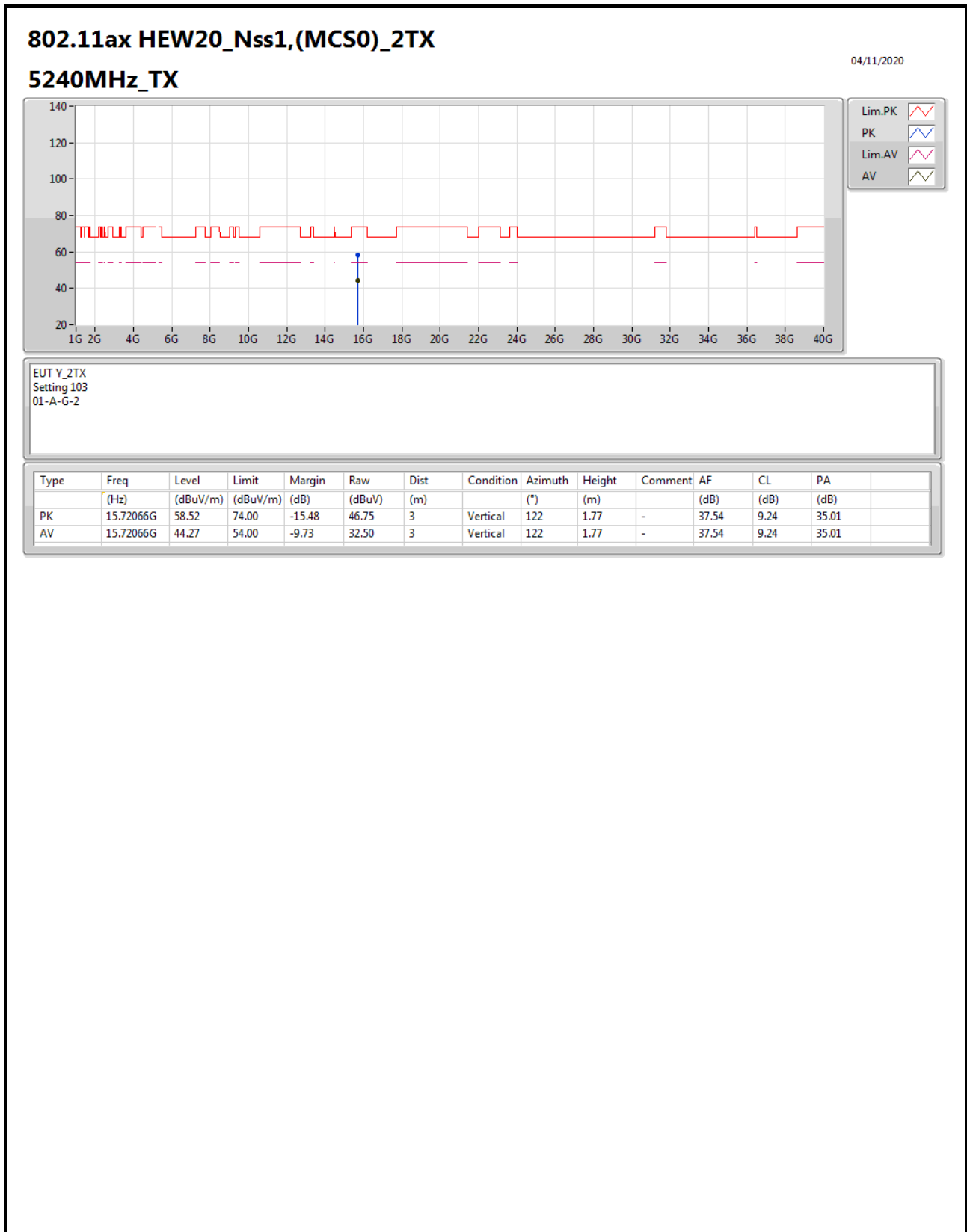


EUT_Y_2TX
Setting 103
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1476G	62.34	74.00	-11.66	59.99	3	Horizontal	71	1.80	-	31.81	5.17	34.63
AV	5.15G	47.09	54.00	-6.91	44.75	3	Horizontal	71	1.80	-	31.80	5.17	34.63
PK	5.2412G	113.29	Inf	-Inf	111.28	3	Horizontal	71	1.80	-	31.44	5.24	34.67
AV	5.2412G	99.67	Inf	-Inf	97.66	3	Horizontal	71	1.80	-	31.44	5.24	34.67
PK	5.35G	59.87	74.00	-14.13	57.93	3	Horizontal	71	1.80	-	31.30	5.35	34.71
AV	5.35G	43.58	54.00	-10.42	41.64	3	Horizontal	71	1.80	-	31.30	5.35	34.71

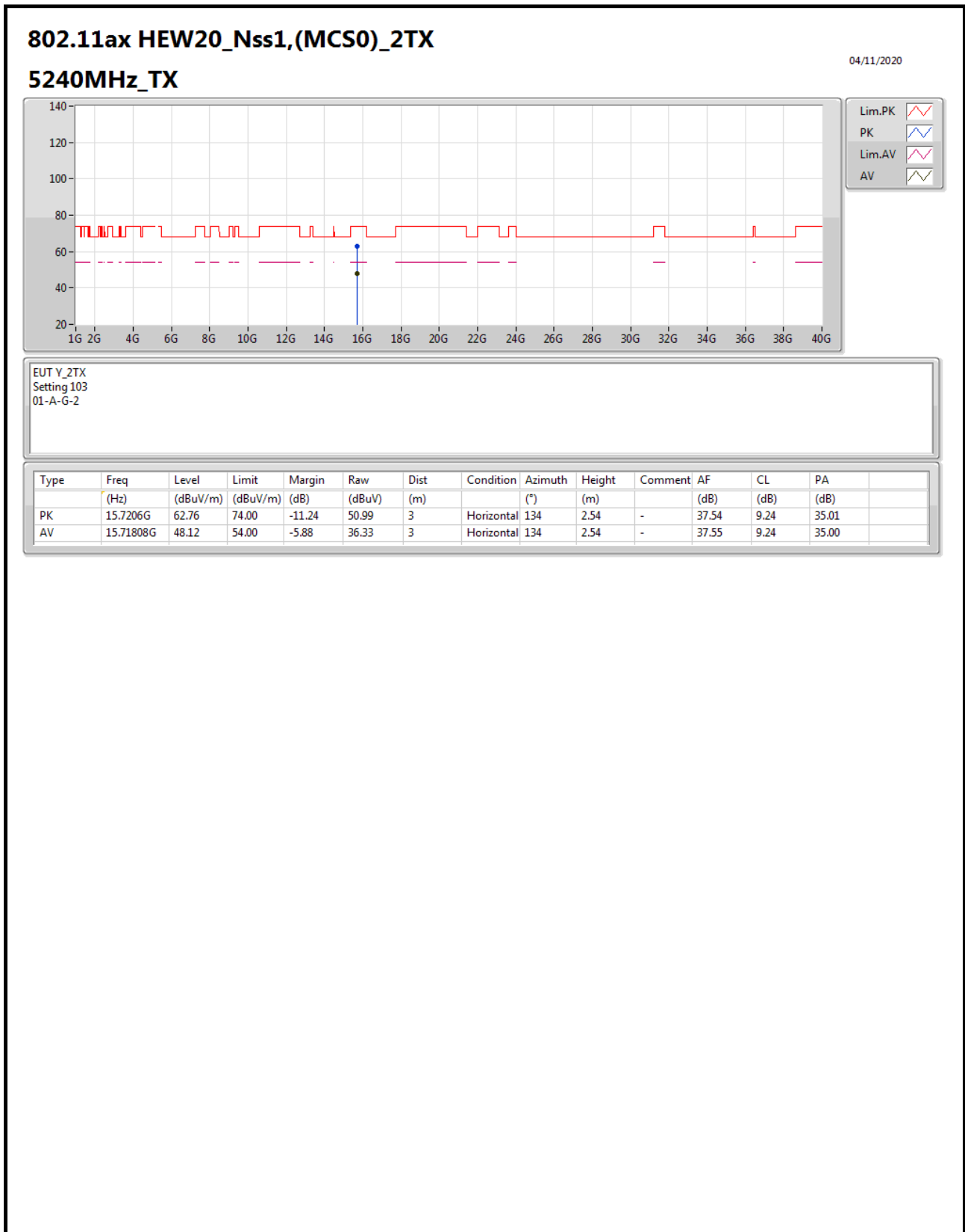


Test Mode: Mode 1



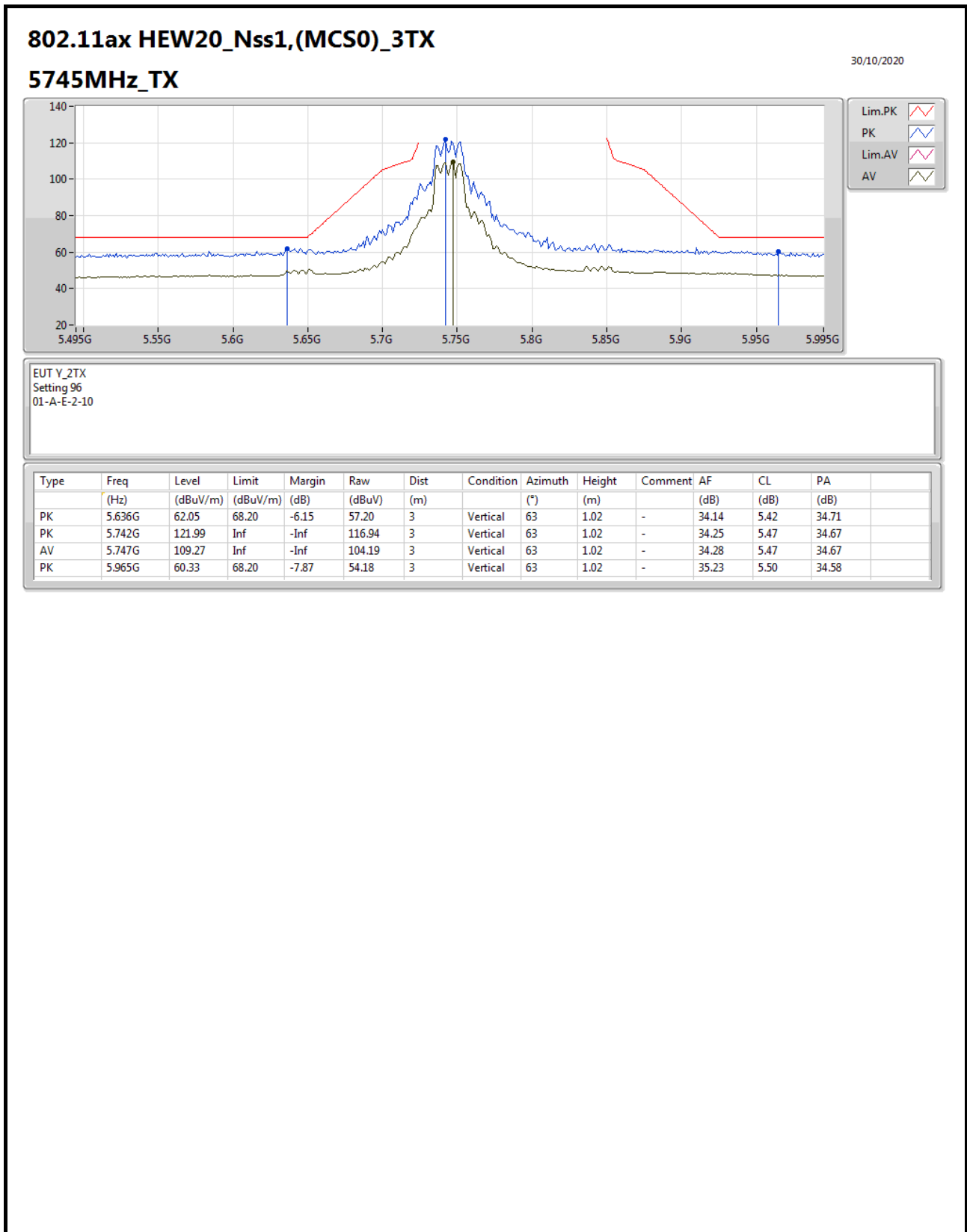


Test Mode: Mode 1



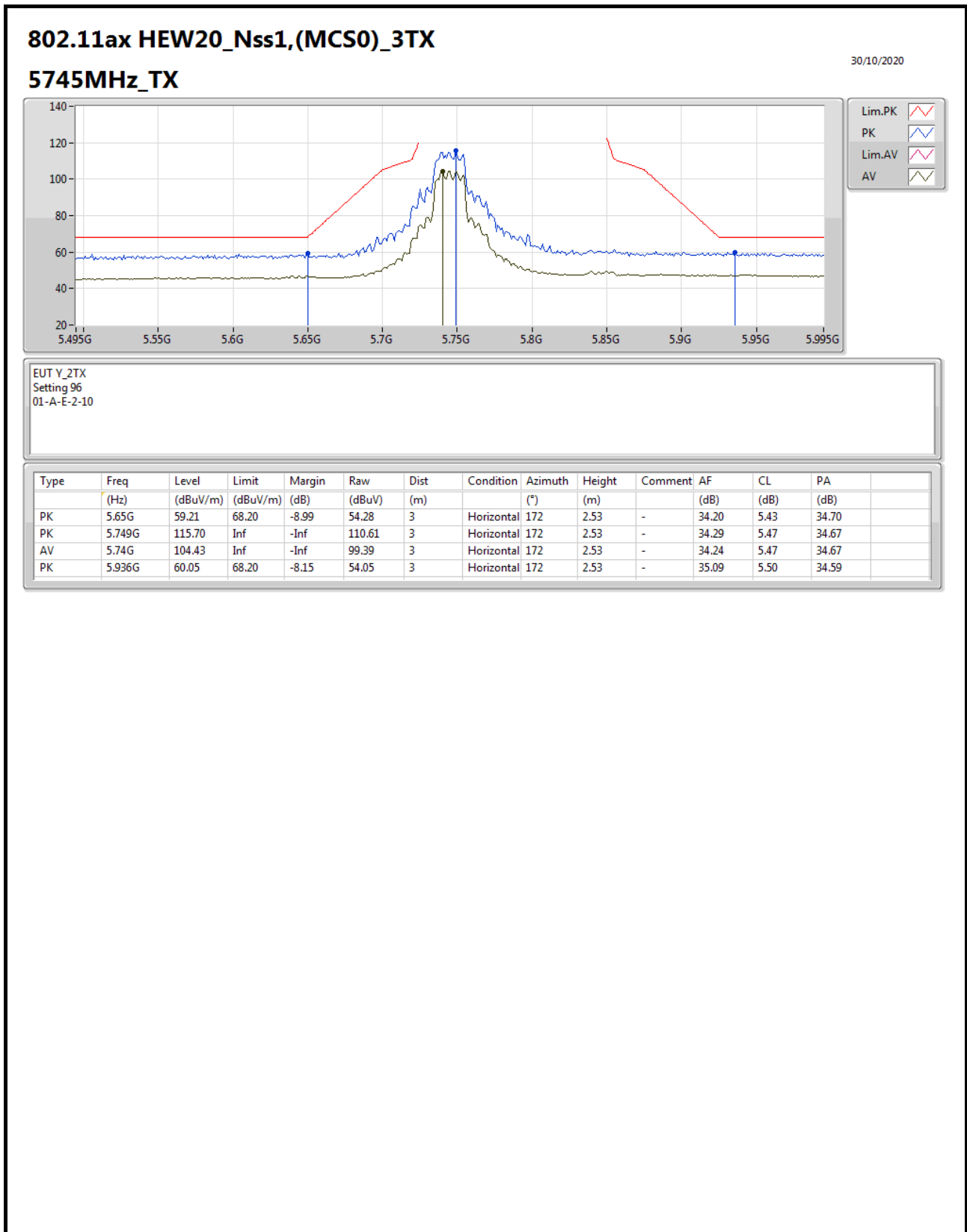


Test Mode: Mode 1

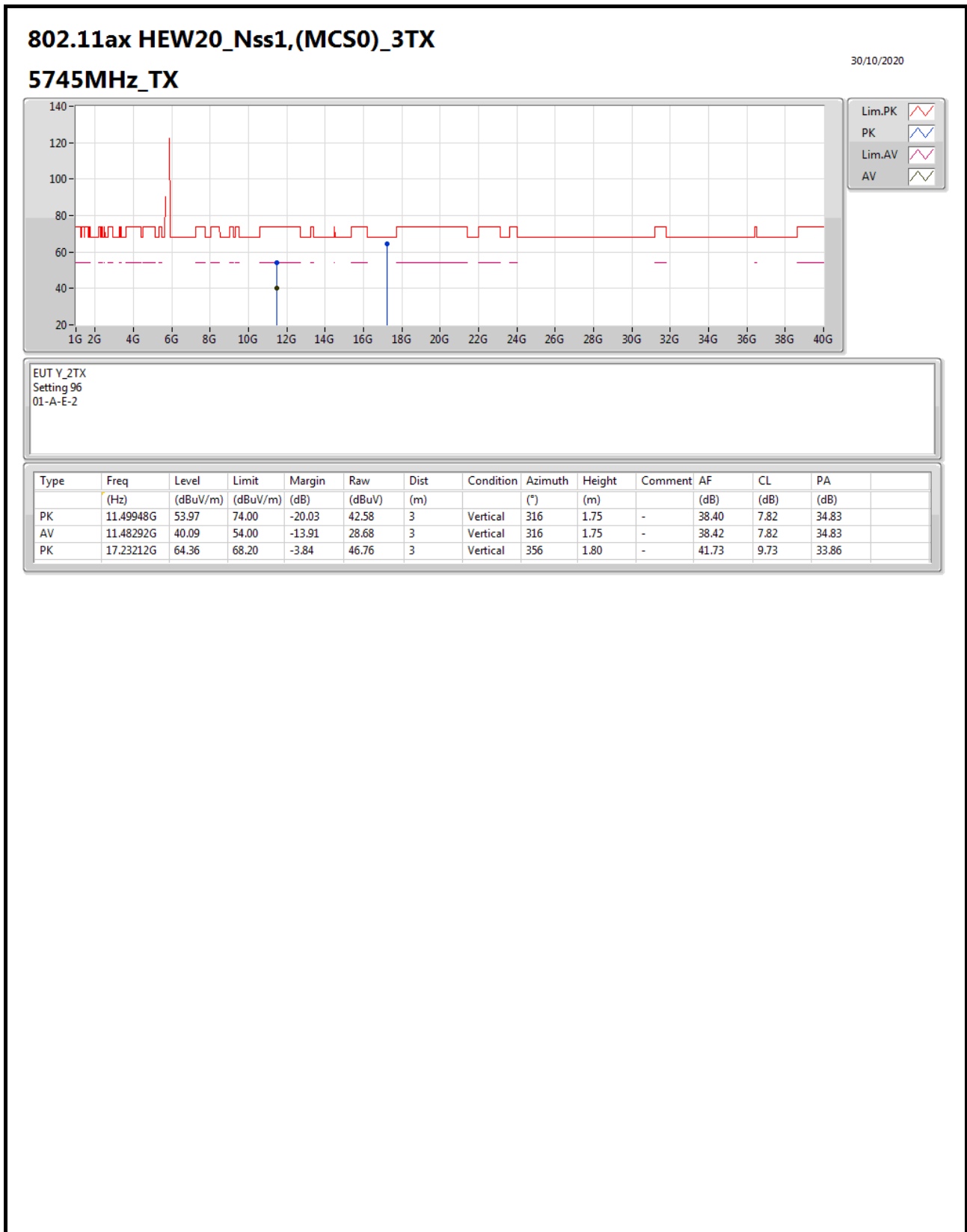




Test Mode: Mode 1

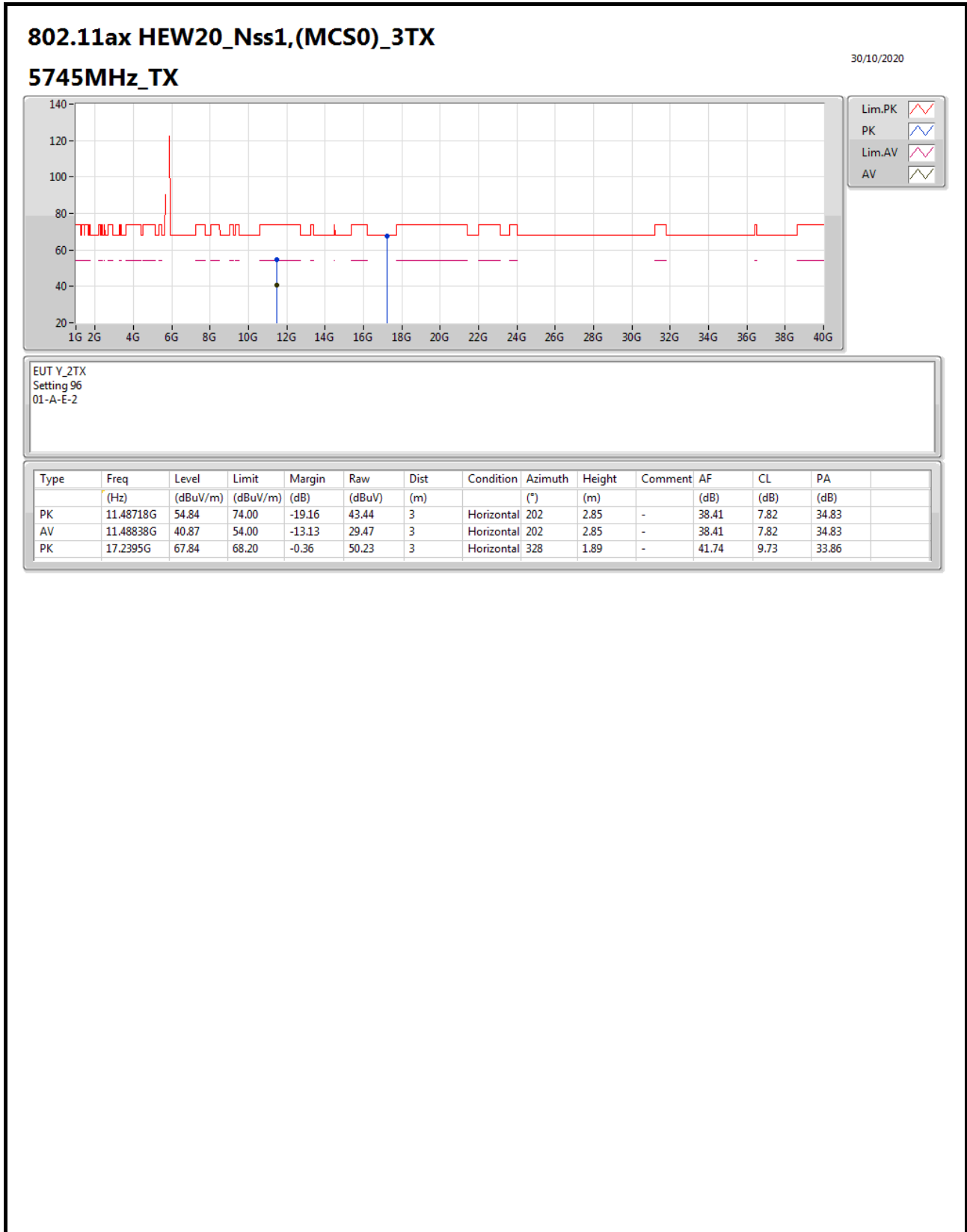


Test Mode: Mode 1



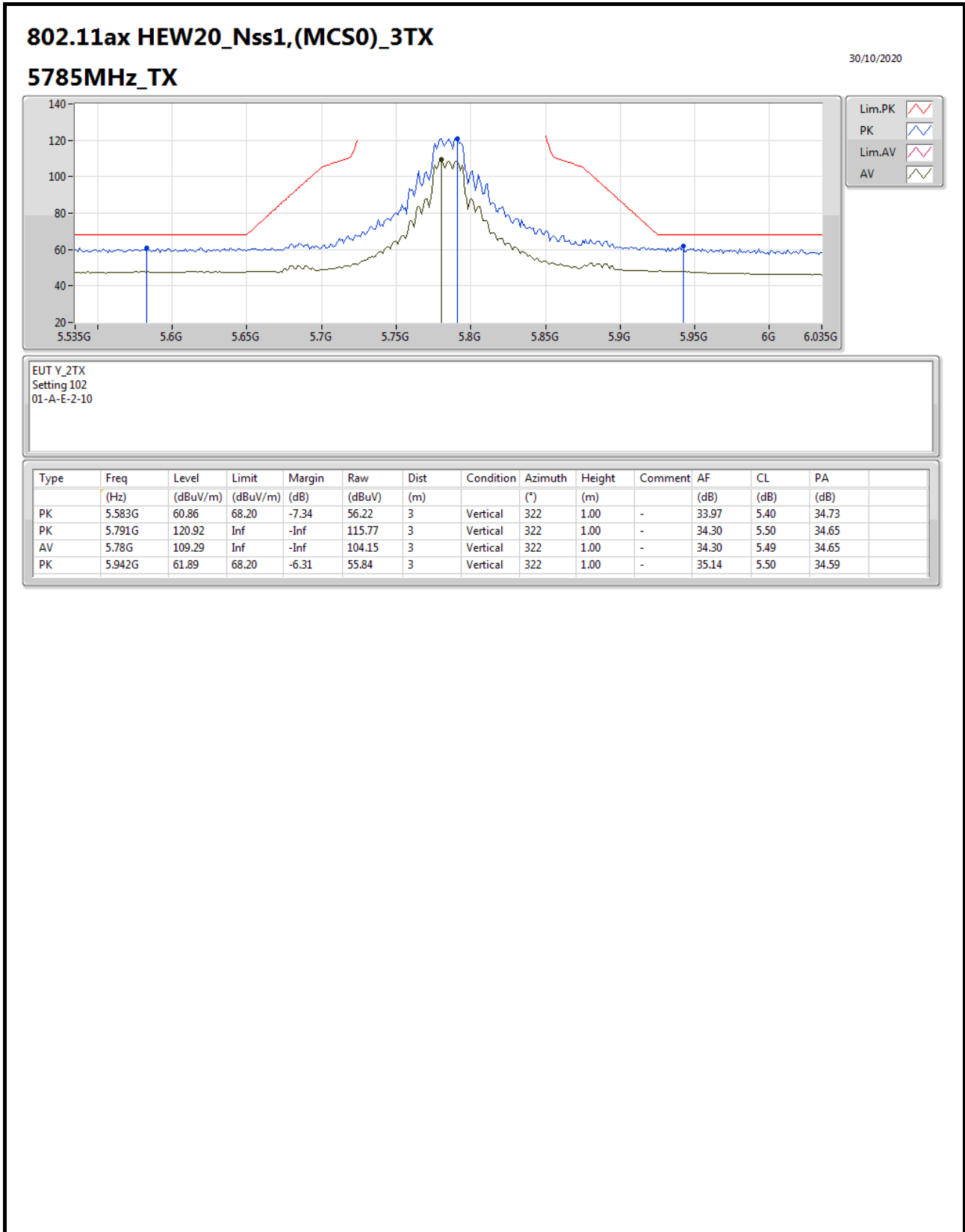


Test Mode: Mode 1



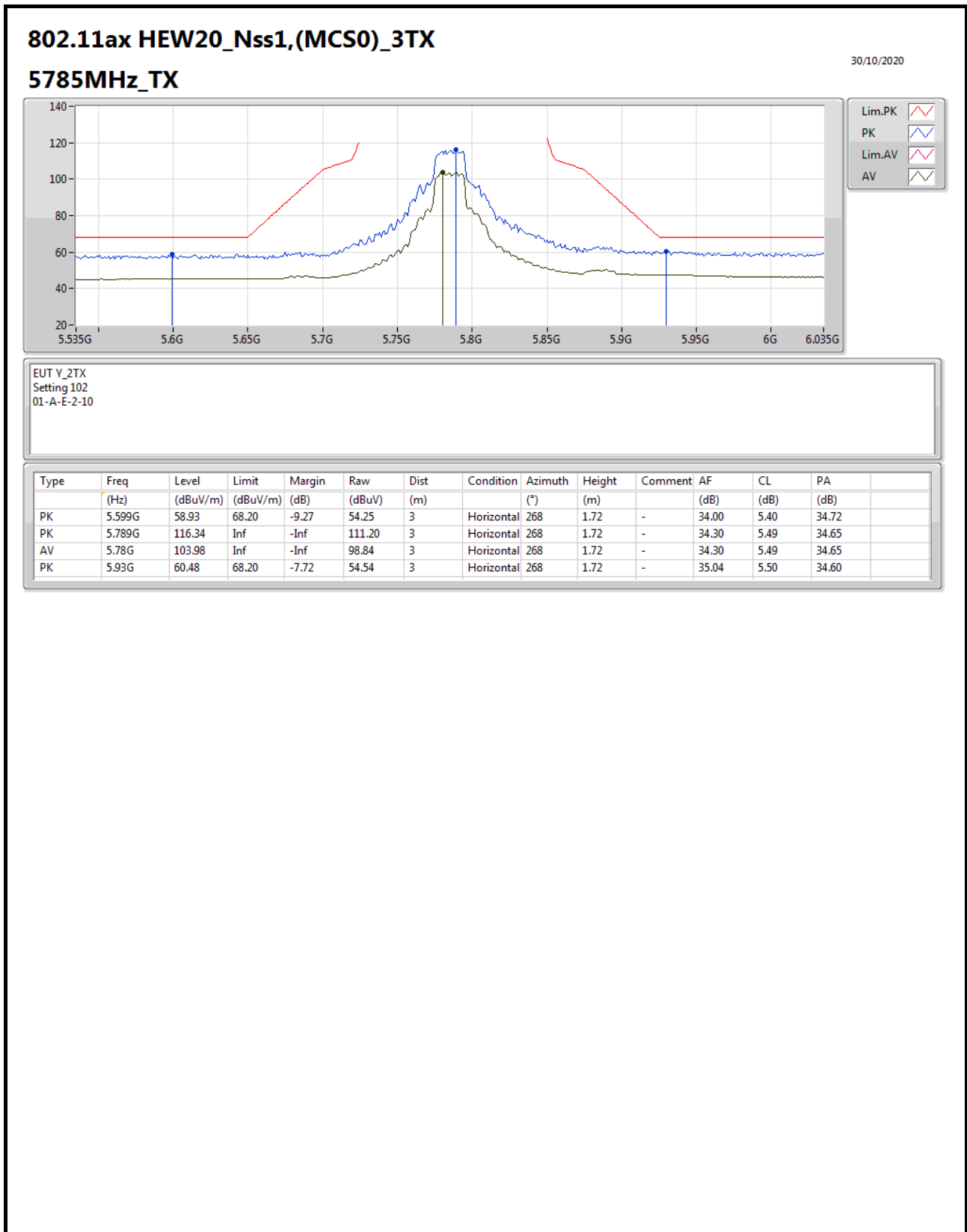


Test Mode: Mode 1



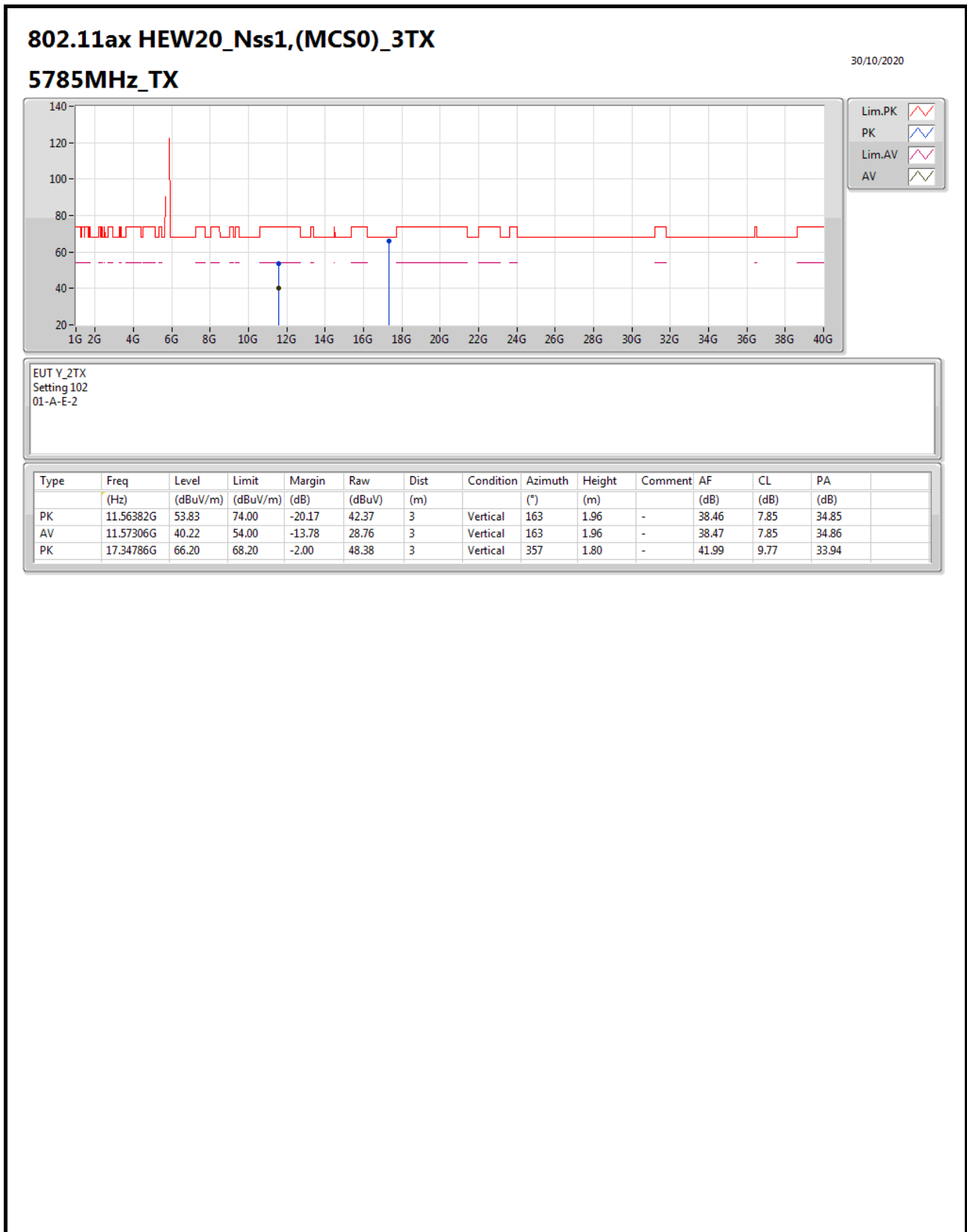


Test Mode: Mode 1



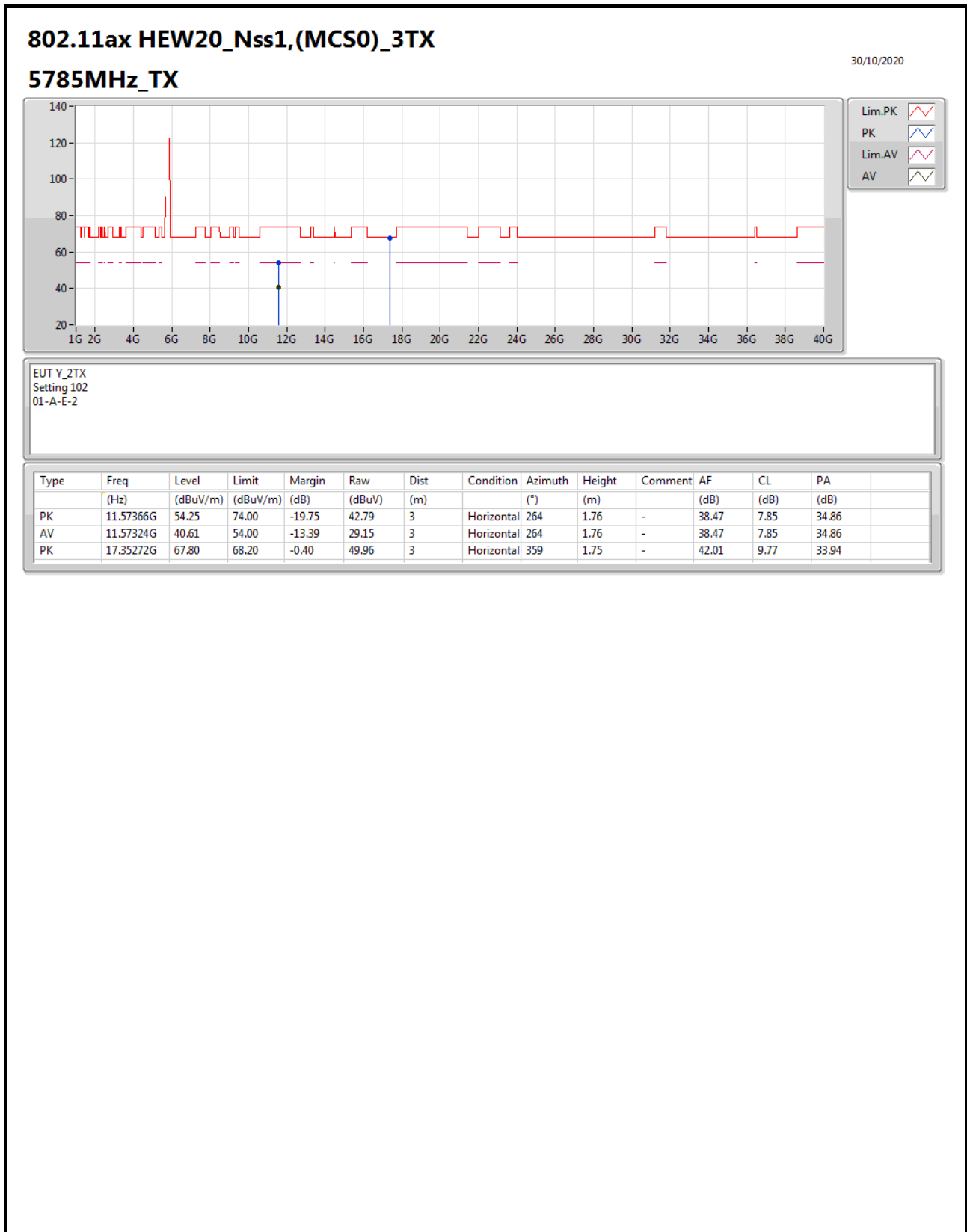


Test Mode: Mode 1

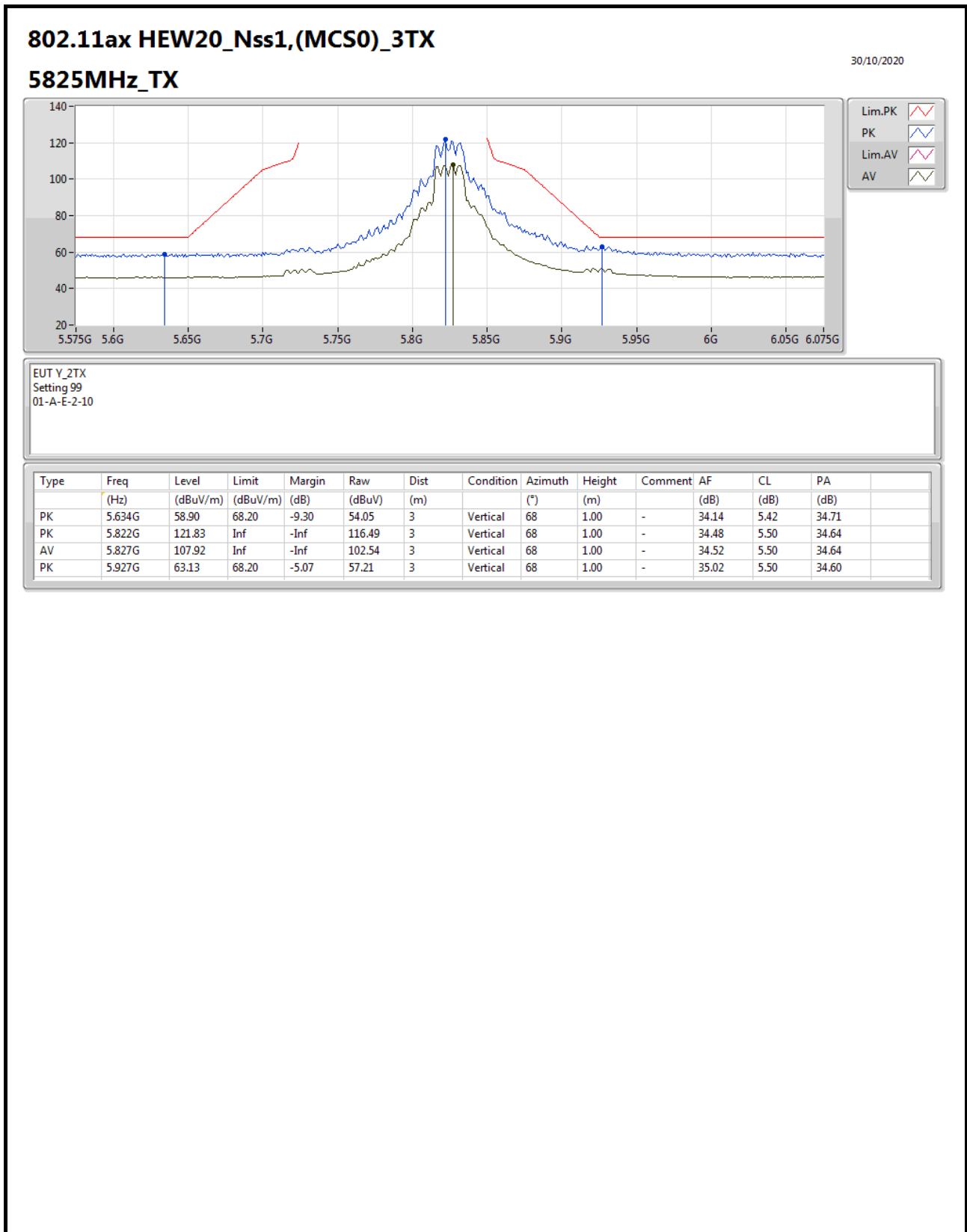




Test Mode: Mode 1

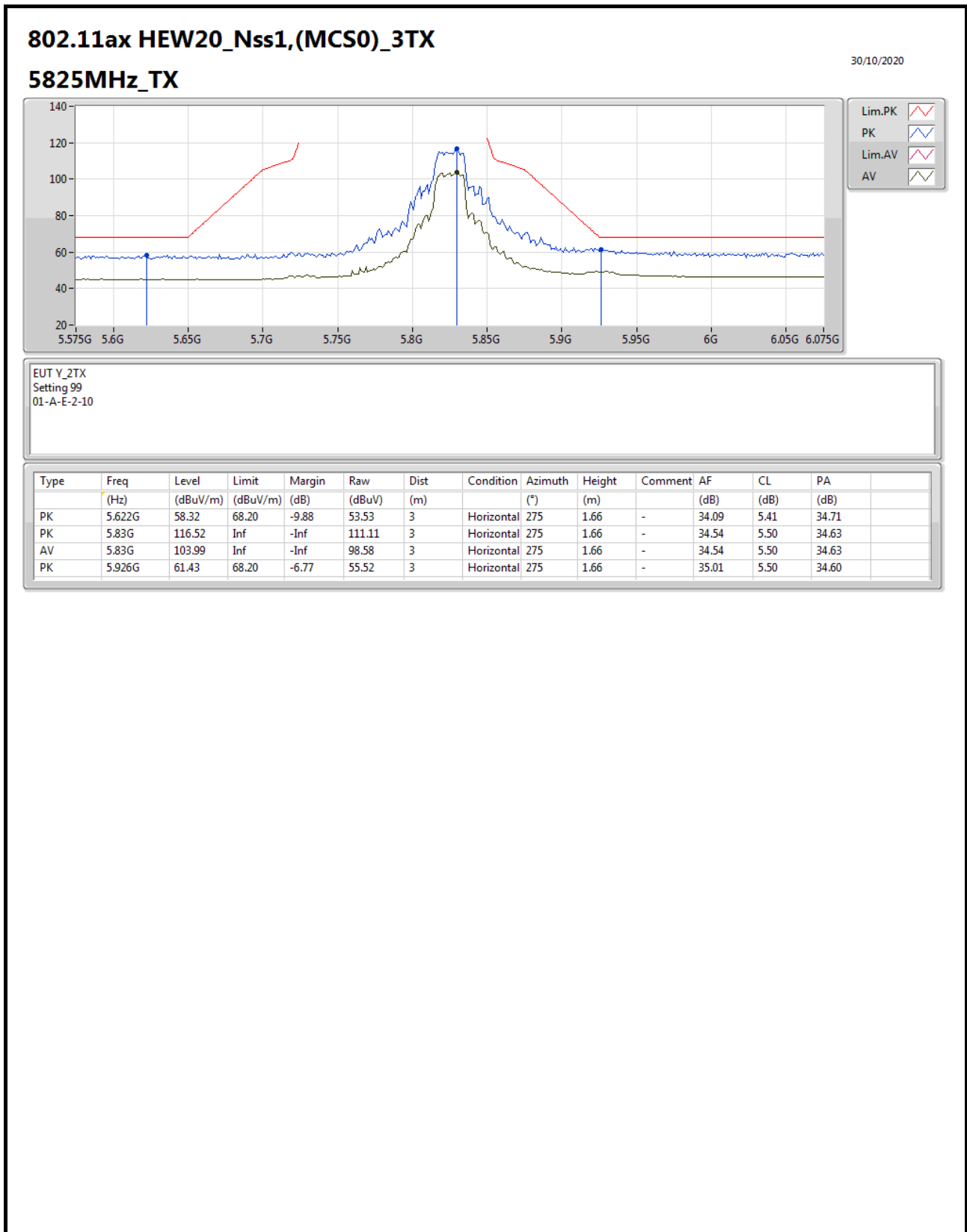


Test Mode: Mode 1

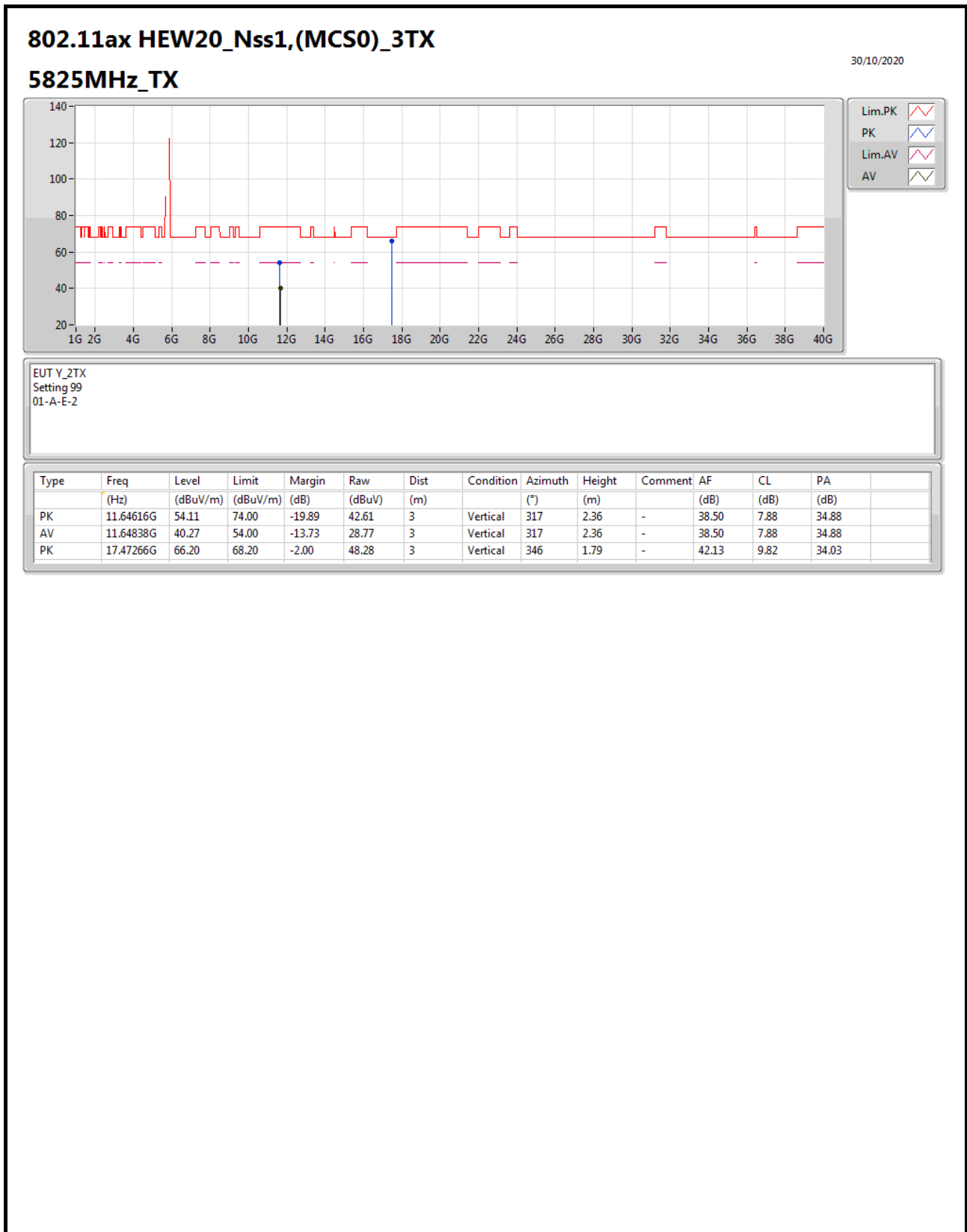




Test Mode: Mode 1

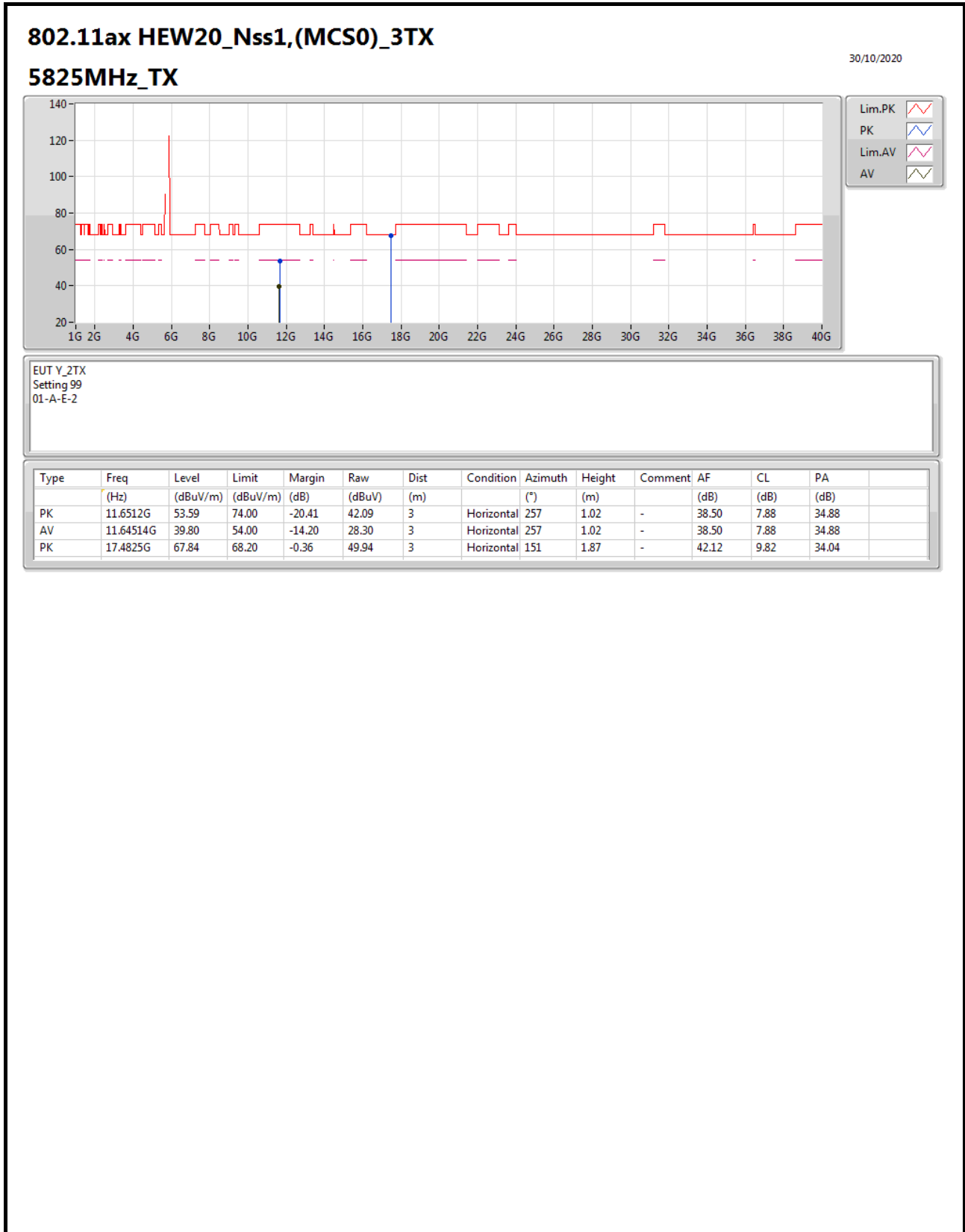


Test Mode: Mode 1



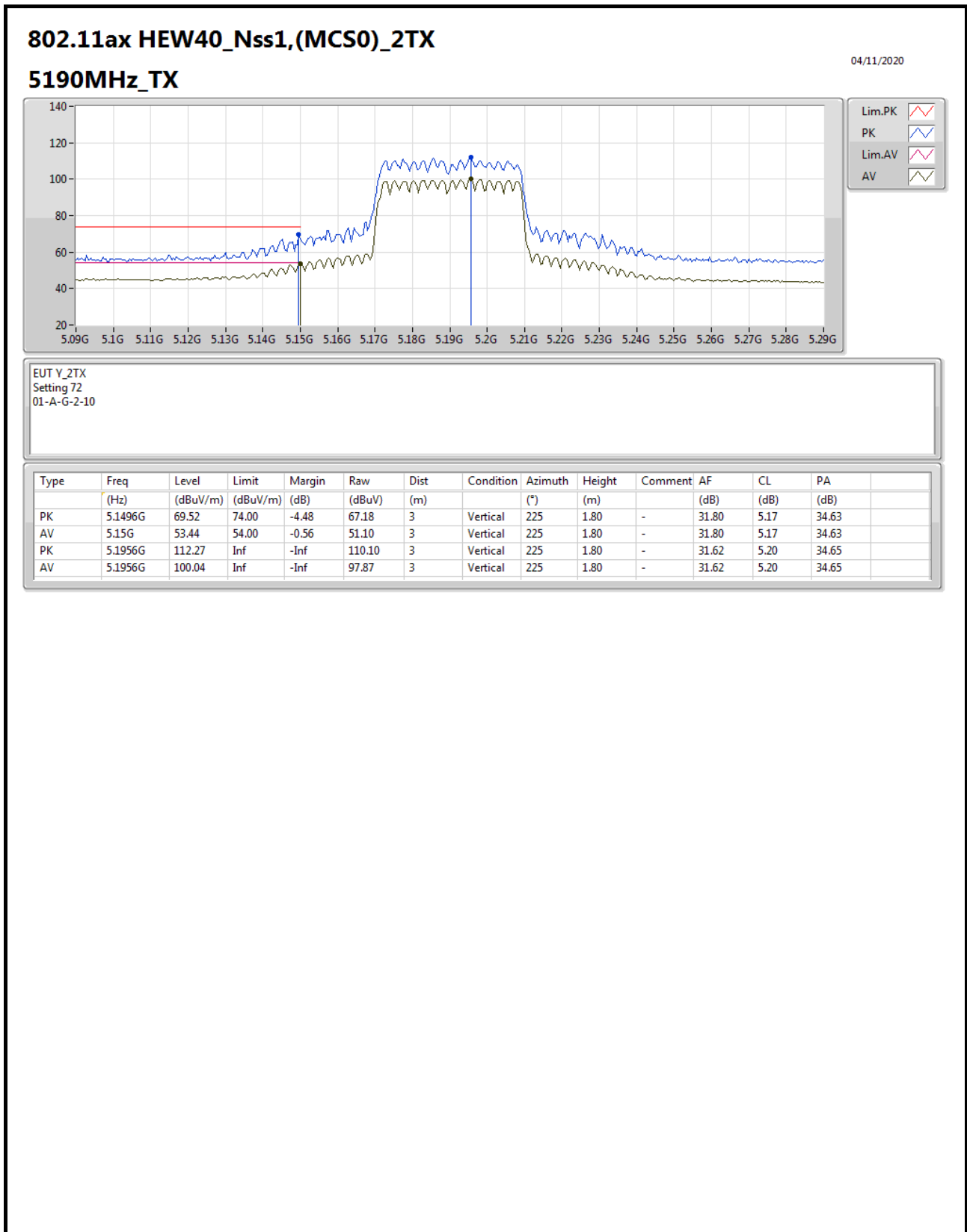


Test Mode: Mode 1





Test Mode: Mode 1



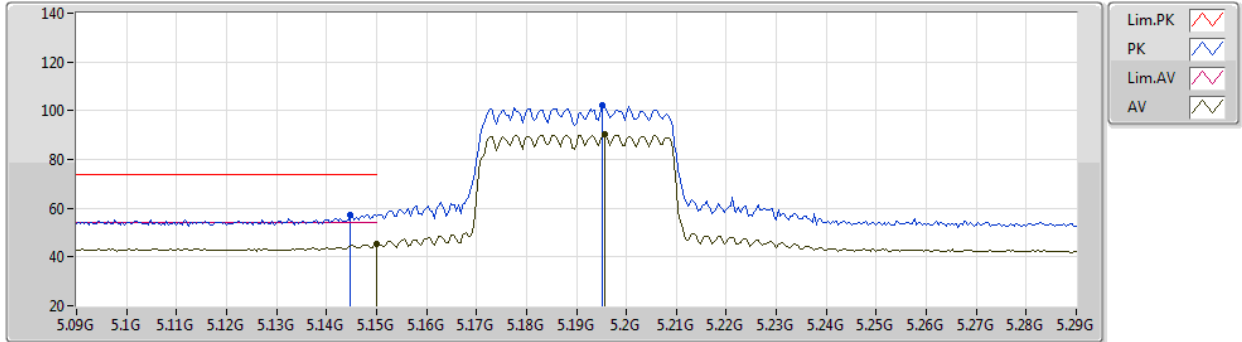


Test Mode: Mode 1

802.11ax HEW40_Nss1,(MCS0)_2TX

04/11/2020

5190MHz_TX

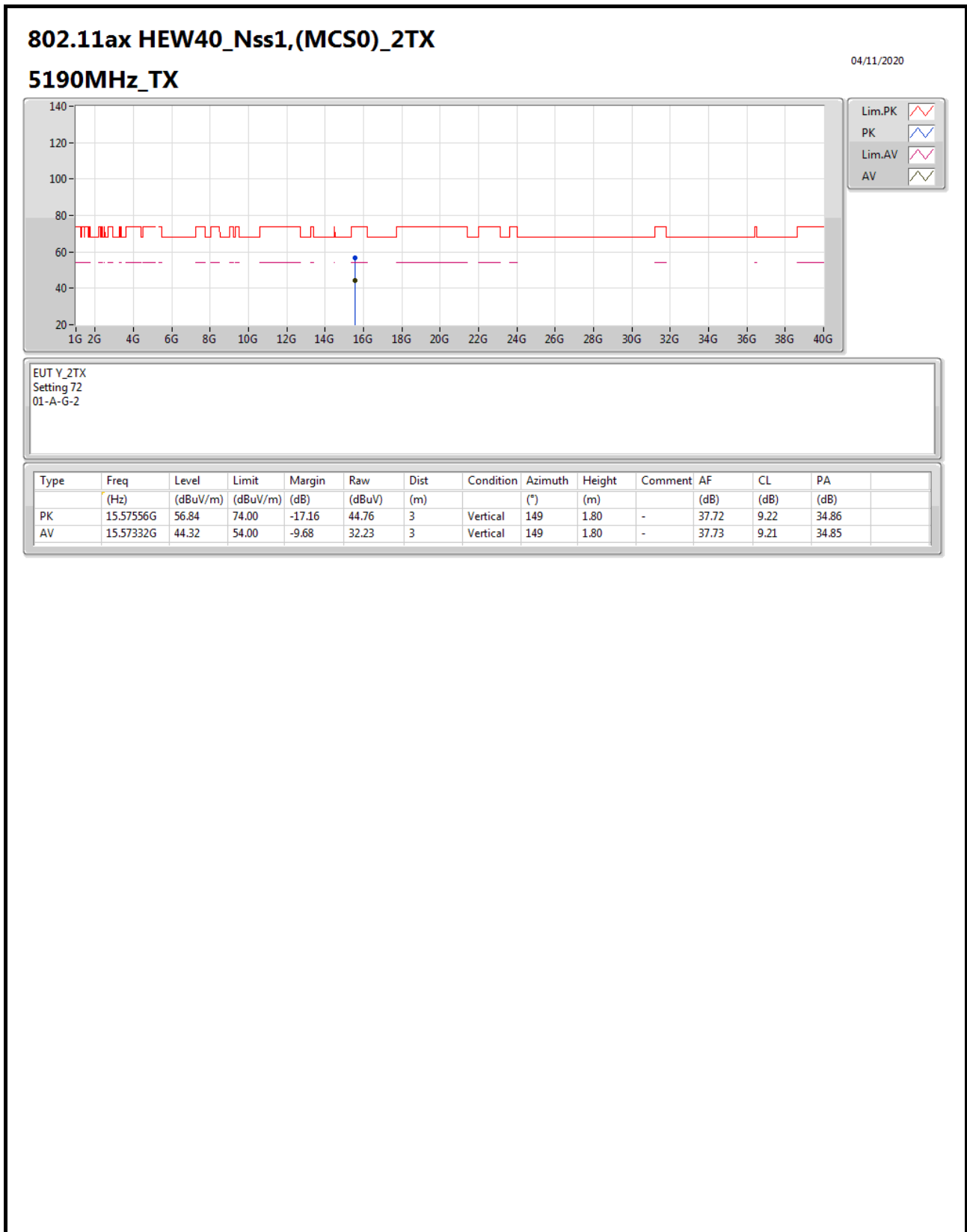


EUT_Y_2TX
Setting 72
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1448G	57.46	74.00	-16.54	55.10	3	Horizontal	86	2.83	-	31.82	5.17	34.63
AV	5.15G	45.45	54.00	-8.55	43.11	3	Horizontal	86	2.83	-	31.80	5.17	34.63
PK	5.1952G	102.42	Inf	-Inf	100.25	3	Horizontal	86	2.83	-	31.62	5.20	34.65
AV	5.1956G	90.37	Inf	-Inf	88.20	3	Horizontal	86	2.83	-	31.62	5.20	34.65

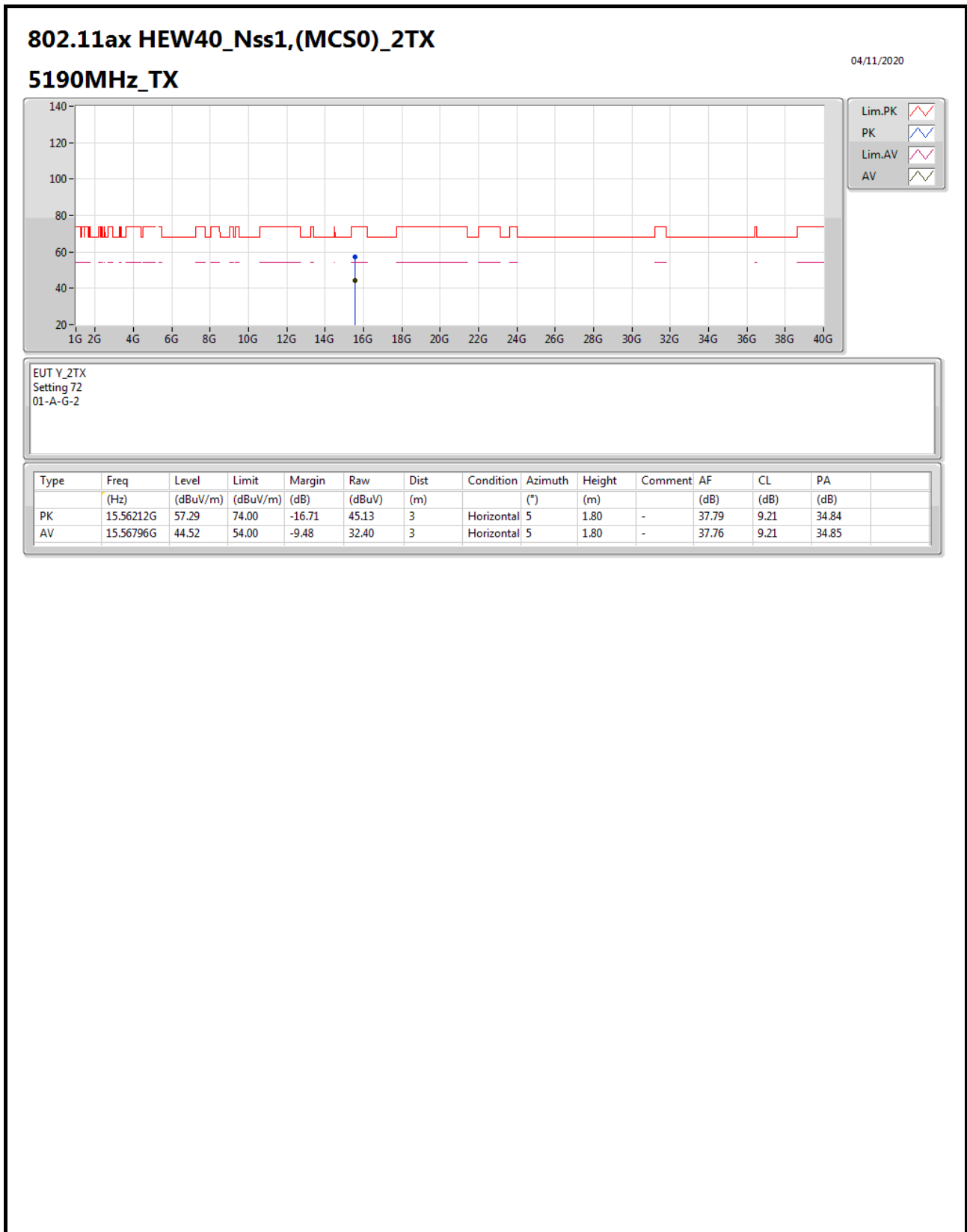


Test Mode: Mode 1





Test Mode: Mode 1

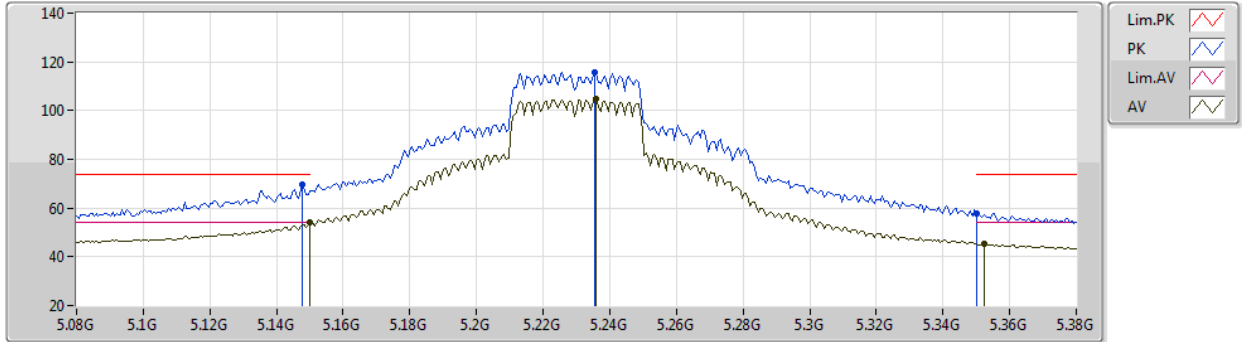


Test Mode: Mode 1

802.11ax HEW40_Nss1,(MCS0)_2TX

04/11/2020

5230MHz_TX



EUT_Y_2TX
Setting 96
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1478G	69.42	74.00	-4.58	67.07	3	Vertical	228	1.80	-	31.81	5.17	34.63
AV	5.15G	53.93	54.00	-0.07	51.59	3	Vertical	228	1.80	-	31.80	5.17	34.63
PK	5.2354G	115.88	Inf	-Inf	113.84	3	Vertical	228	1.80	-	31.46	5.24	34.66
AV	5.236G	104.68	Inf	-Inf	102.64	3	Vertical	228	1.80	-	31.46	5.24	34.66
PK	5.35G	57.96	74.00	-16.04	56.02	3	Vertical	228	1.80	-	31.30	5.35	34.71
AV	5.3524G	45.25	54.00	-8.75	43.29	3	Vertical	228	1.80	-	31.32	5.35	34.71

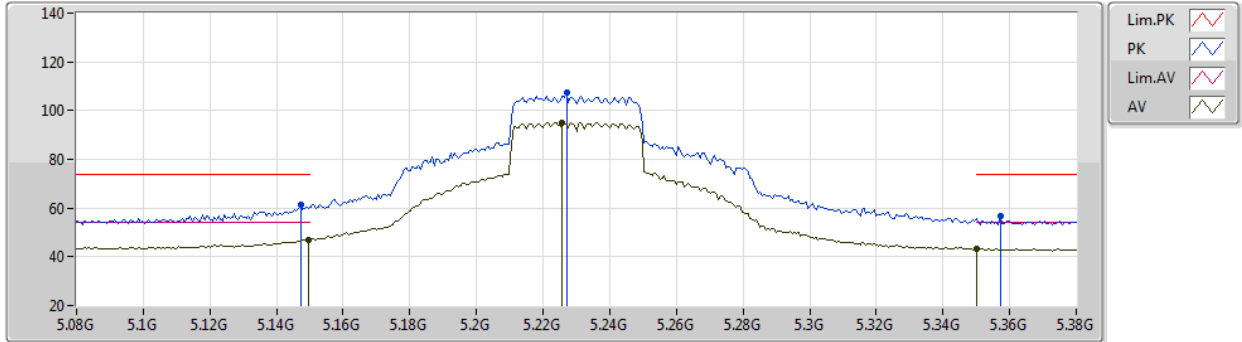


Test Mode: Mode 1

802.11ax HEW40_Nss1,(MCS0)_2TX

04/11/2020

5230MHz_TX

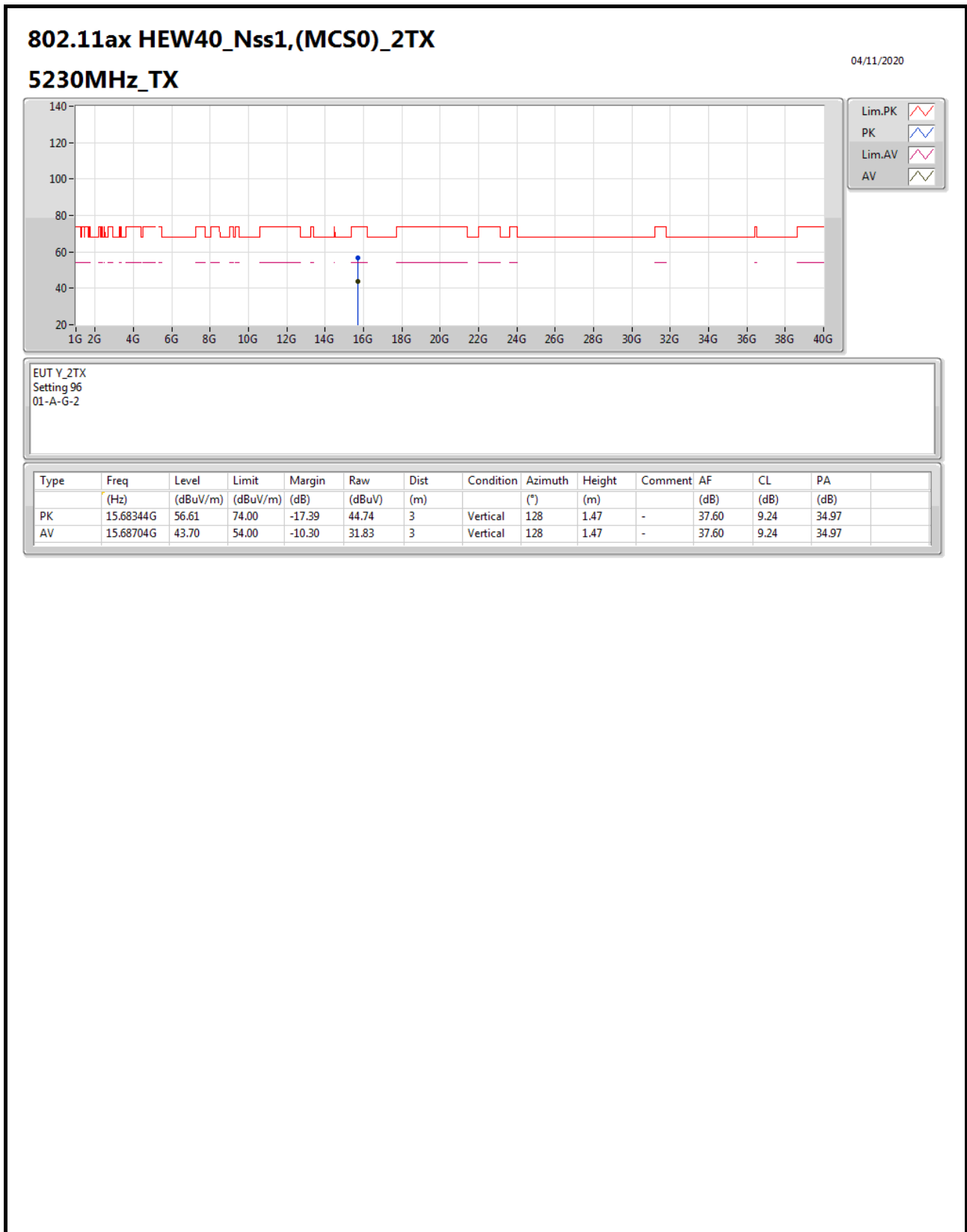


EUT_Y_2TX
Setting 96
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1472G	61.41	74.00	-12.59	59.06	3	Horizontal	73	1.80	-	31.81	5.17	34.63
AV	5.1496G	46.87	54.00	-7.13	44.53	3	Horizontal	73	1.80	-	31.80	5.17	34.63
PK	5.227G	107.33	Inf	-Inf	105.27	3	Horizontal	73	1.80	-	31.49	5.23	34.66
AV	5.2258G	95.08	Inf	-Inf	93.01	3	Horizontal	73	1.80	-	31.50	5.23	34.66
PK	5.3572G	56.86	74.00	-17.14	54.85	3	Horizontal	73	1.80	-	31.36	5.36	34.71
AV	5.35G	43.28	54.00	-10.72	41.34	3	Horizontal	73	1.80	-	31.30	5.35	34.71

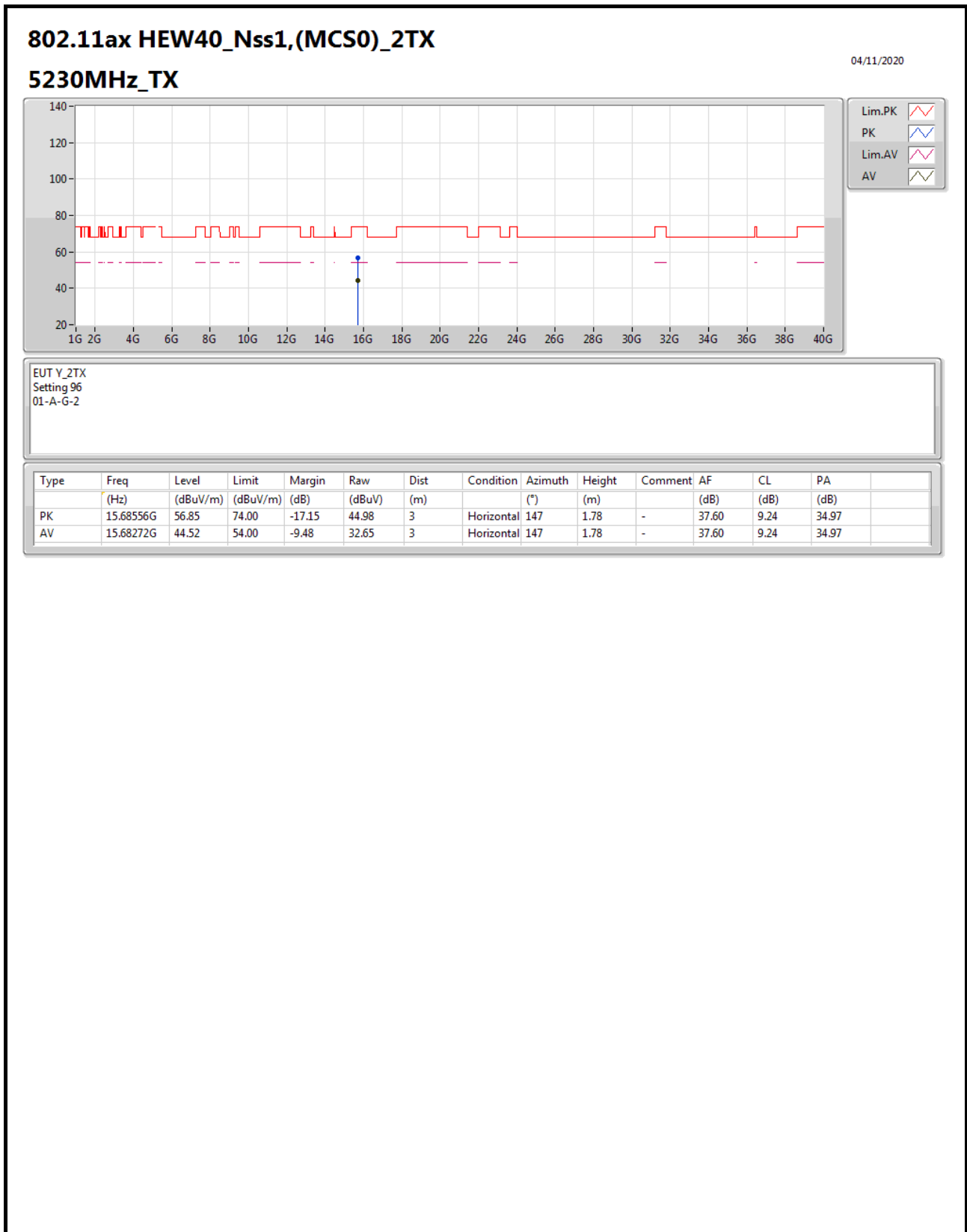


Test Mode: Mode 1



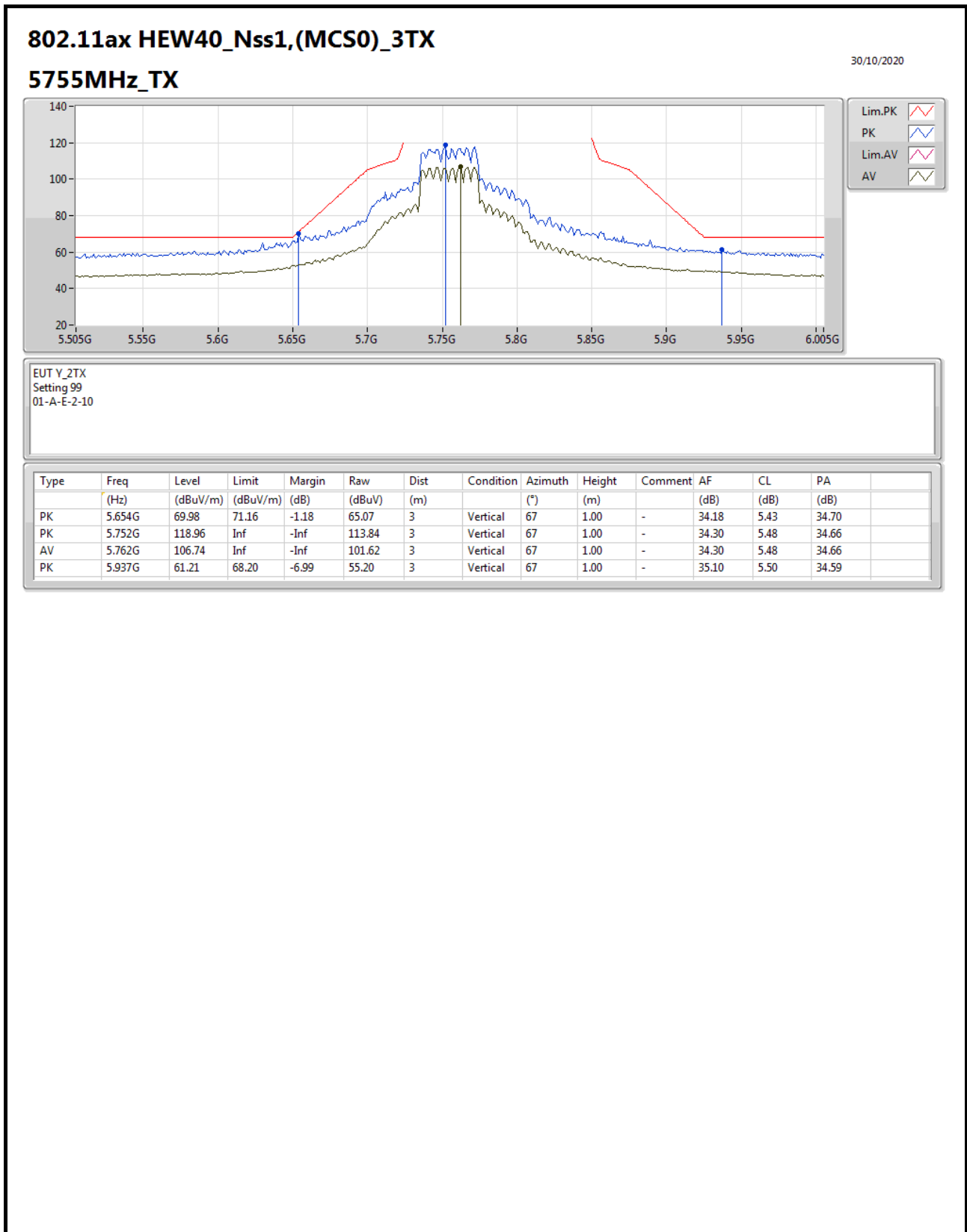


Test Mode: Mode 1



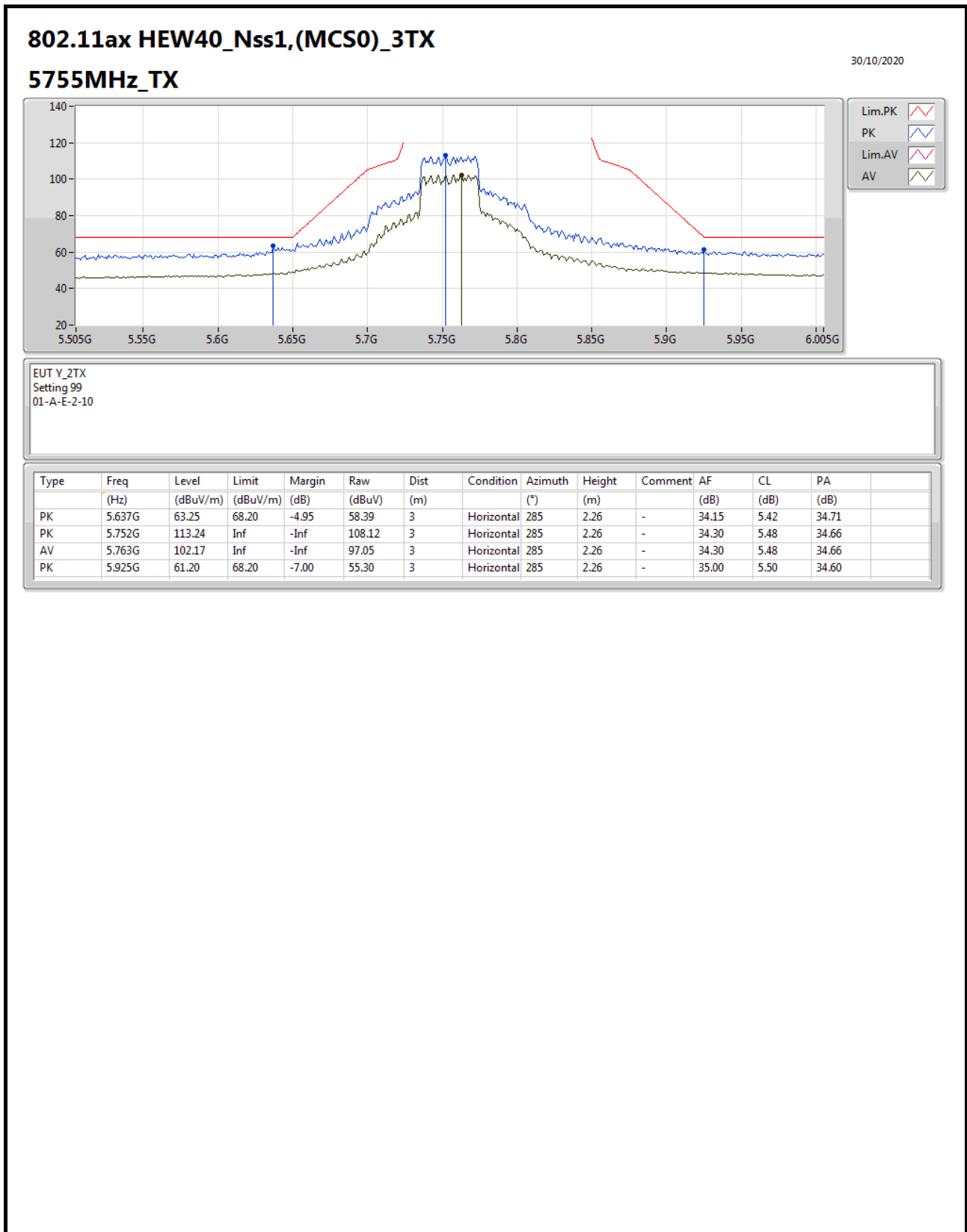


Test Mode: Mode 1

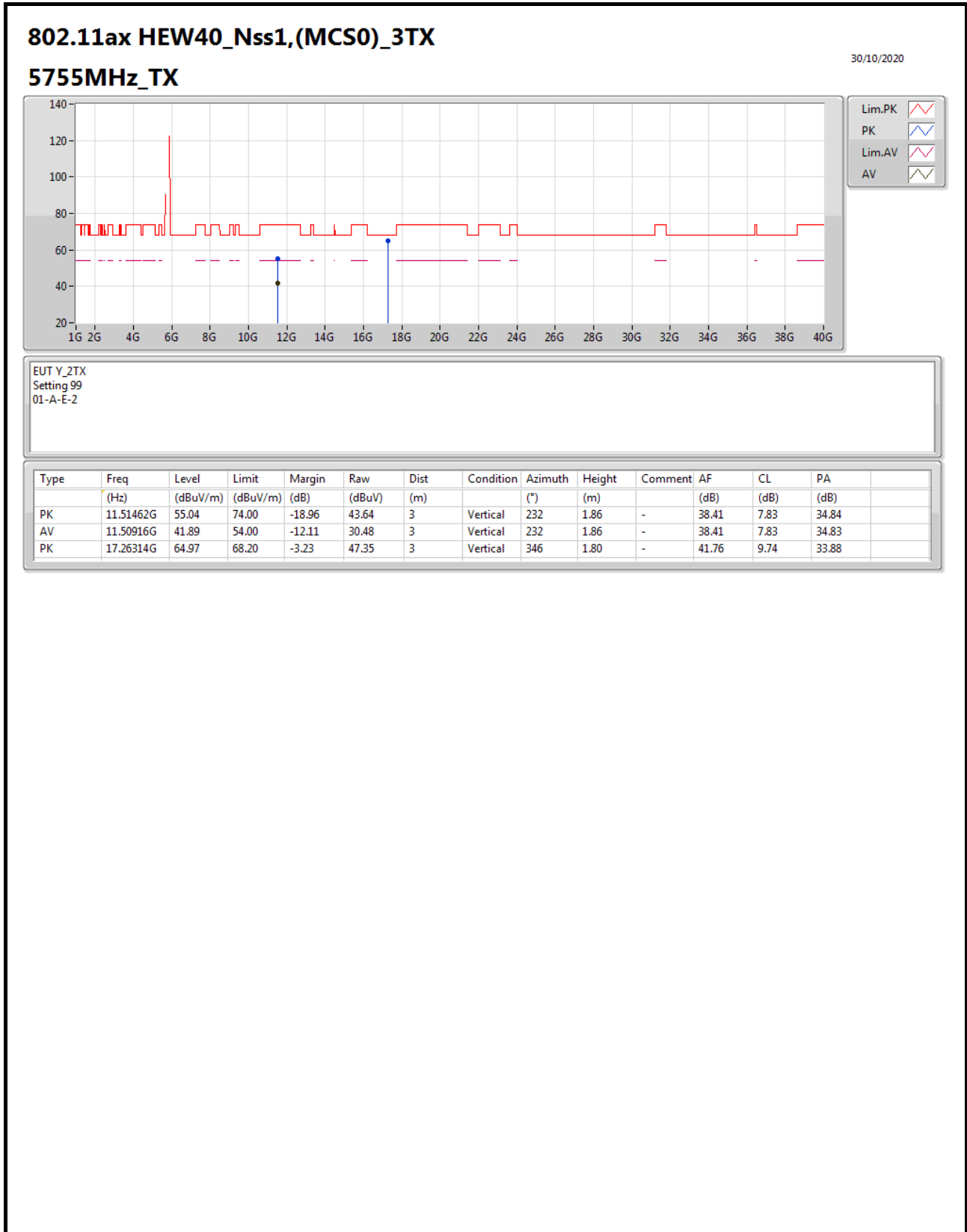




Test Mode: Mode 1

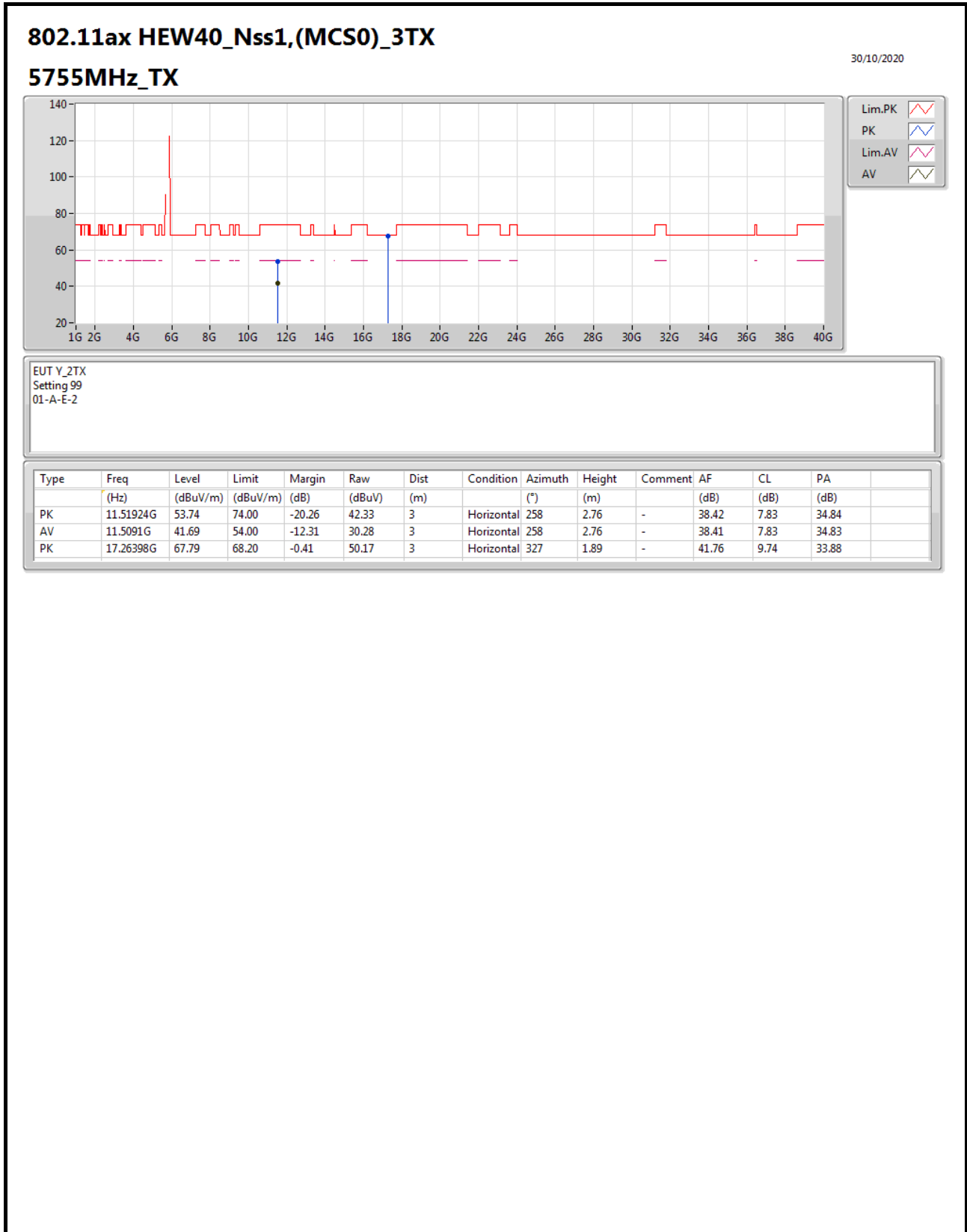


Test Mode: Mode 1



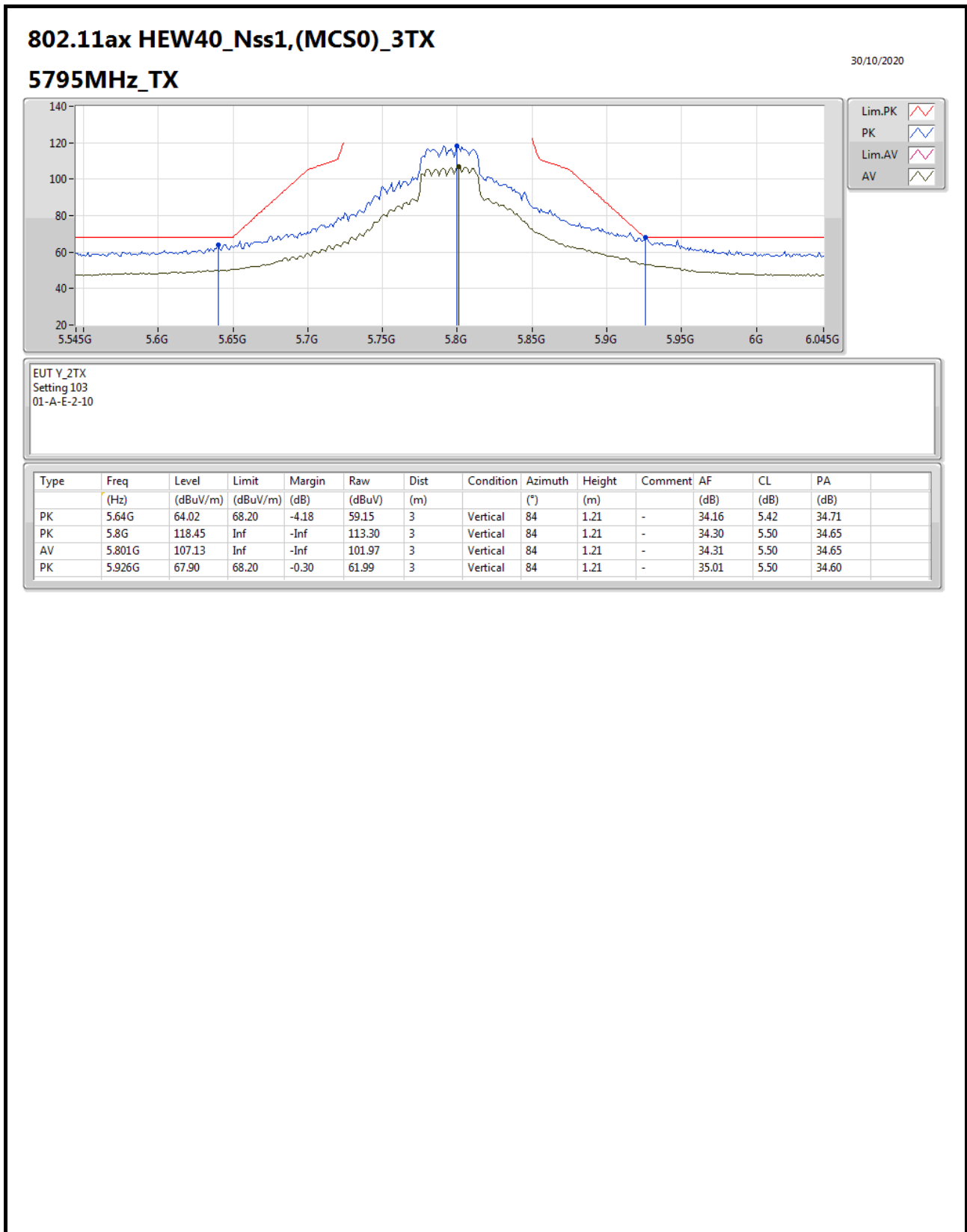


Test Mode: Mode 1





Test Mode: Mode 1



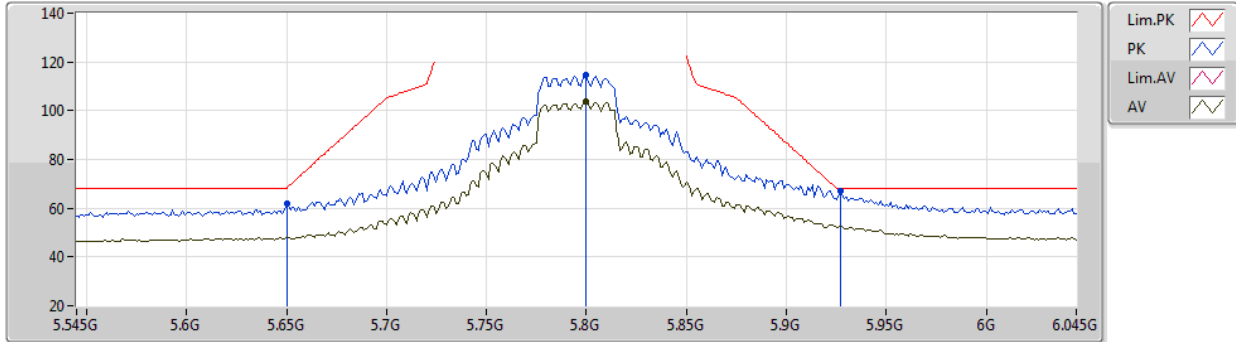


Test Mode: Mode 1

802.11ax HEW40_Nss1,(MCS0)_3TX

30/10/2020

5795MHz_TX

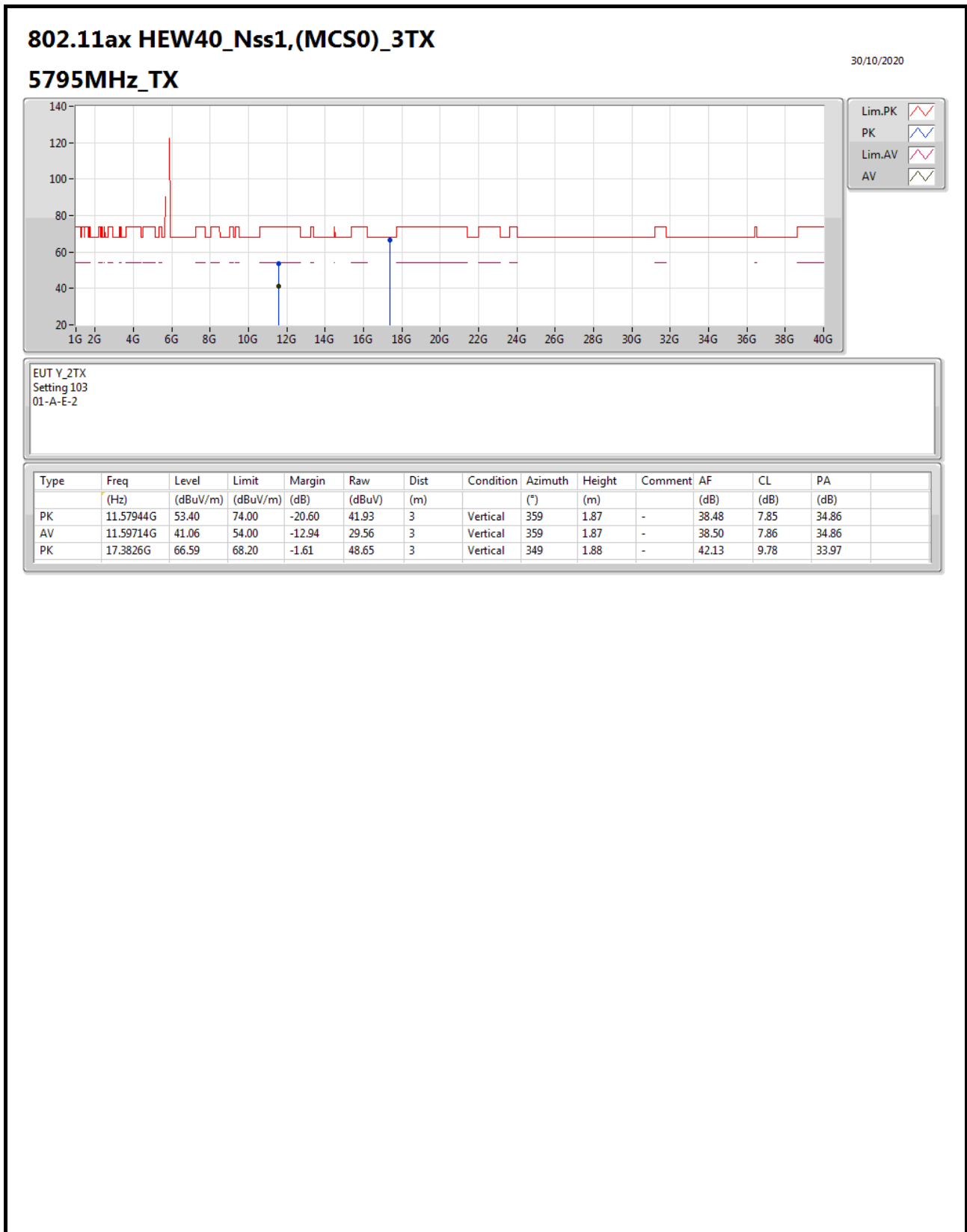


EUT Y_2TX
Setting 103
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.65G	61.80	68.20	-6.40	56.87	3	Horizontal	275	1.66	-	34.20	5.43	34.70
PK	5.8G	114.62	Inf	-Inf	109.47	3	Horizontal	275	1.66	-	34.30	5.50	34.65
AV	5.8G	103.84	Inf	-Inf	98.69	3	Horizontal	275	1.66	-	34.30	5.50	34.65
PK	5.927G	66.95	68.20	-1.25	61.03	3	Horizontal	275	1.66	-	35.02	5.50	34.60

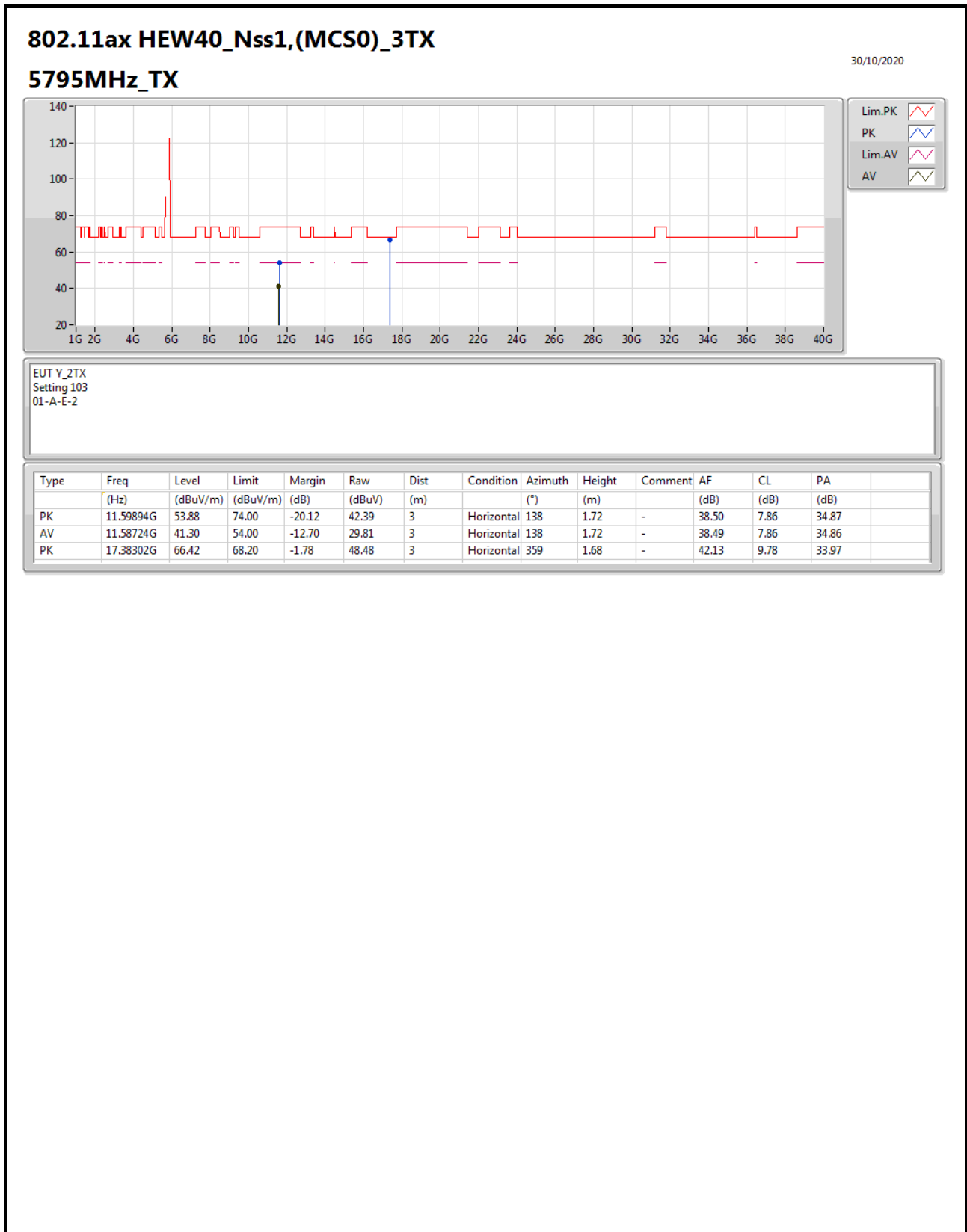


Test Mode: Mode 1





Test Mode: Mode 1



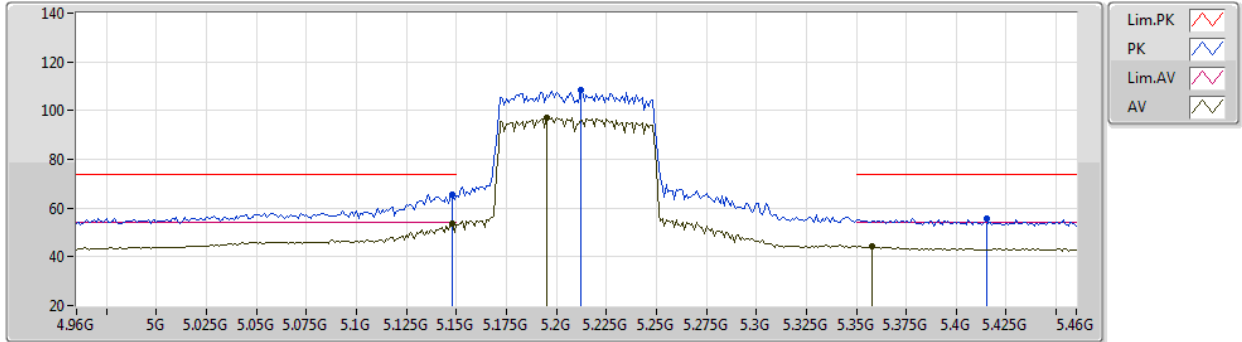


Test Mode: Mode 1

802.11ax HEW80_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX



EUT_Y_2TX
Setting 72
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.148G	65.72	74.00	-8.28	63.37	3	Vertical	220	1.79	-	31.81	5.17	34.63
AV	5.148G	53.82	54.00	-0.18	51.47	3	Vertical	220	1.79	-	31.81	5.17	34.63
PK	5.212G	108.43	Inf	-Inf	106.33	3	Vertical	220	1.79	-	31.55	5.21	34.66
AV	5.195G	97.09	Inf	-Inf	94.92	3	Vertical	220	1.79	-	31.62	5.20	34.65
PK	5.415G	55.65	74.00	-18.35	53.28	3	Vertical	220	1.79	-	31.70	5.40	34.73
AV	5.358G	44.33	54.00	-9.67	42.32	3	Vertical	220	1.79	-	31.36	5.36	34.71

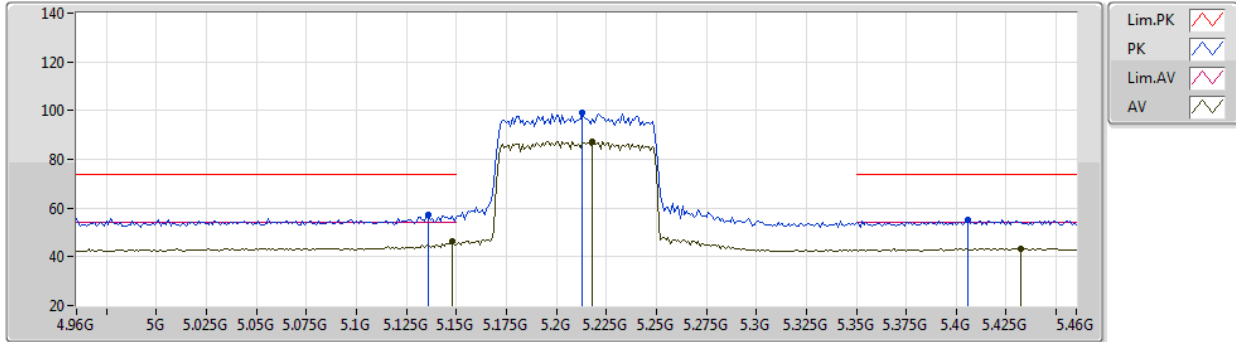


Test Mode: Mode 1

802.11ax HEW80_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX

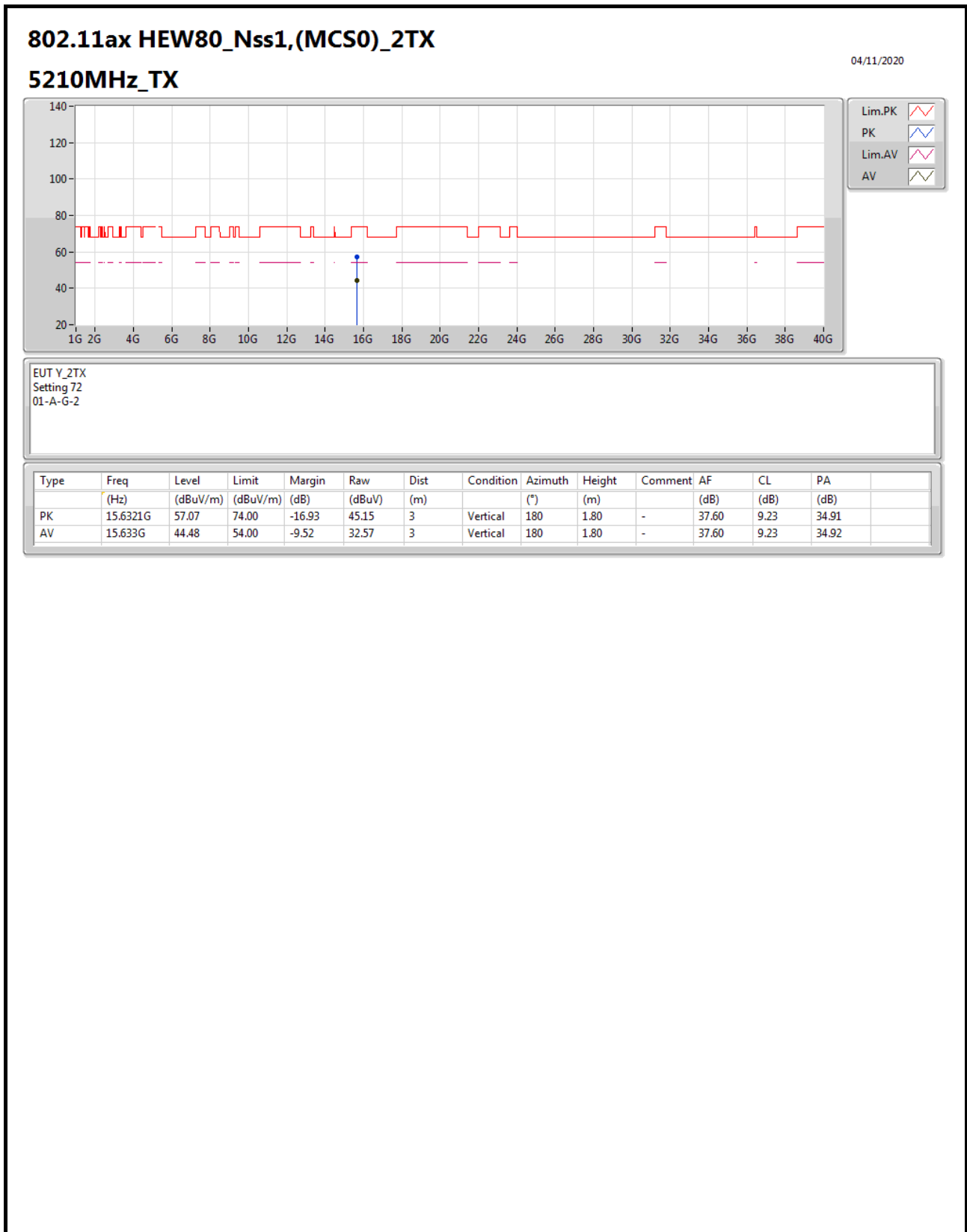


EUT_Y_2TX
Setting 72
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.136G	57.33	74.00	-16.67	54.93	3	Horizontal	85	2.80	-	31.86	5.17	34.63
AV	5.148G	46.29	54.00	-7.71	43.94	3	Horizontal	85	2.80	-	31.81	5.17	34.63
PK	5.213G	99.33	Inf	-Inf	97.23	3	Horizontal	85	2.80	-	31.55	5.21	34.66
AV	5.218G	87.43	Inf	-Inf	85.34	3	Horizontal	85	2.80	-	31.53	5.22	34.66
PK	5.406G	55.03	74.00	-18.97	52.66	3	Horizontal	85	2.80	-	31.70	5.40	34.73
AV	5.432G	43.49	54.00	-10.51	41.13	3	Horizontal	85	2.80	-	31.70	5.40	34.74

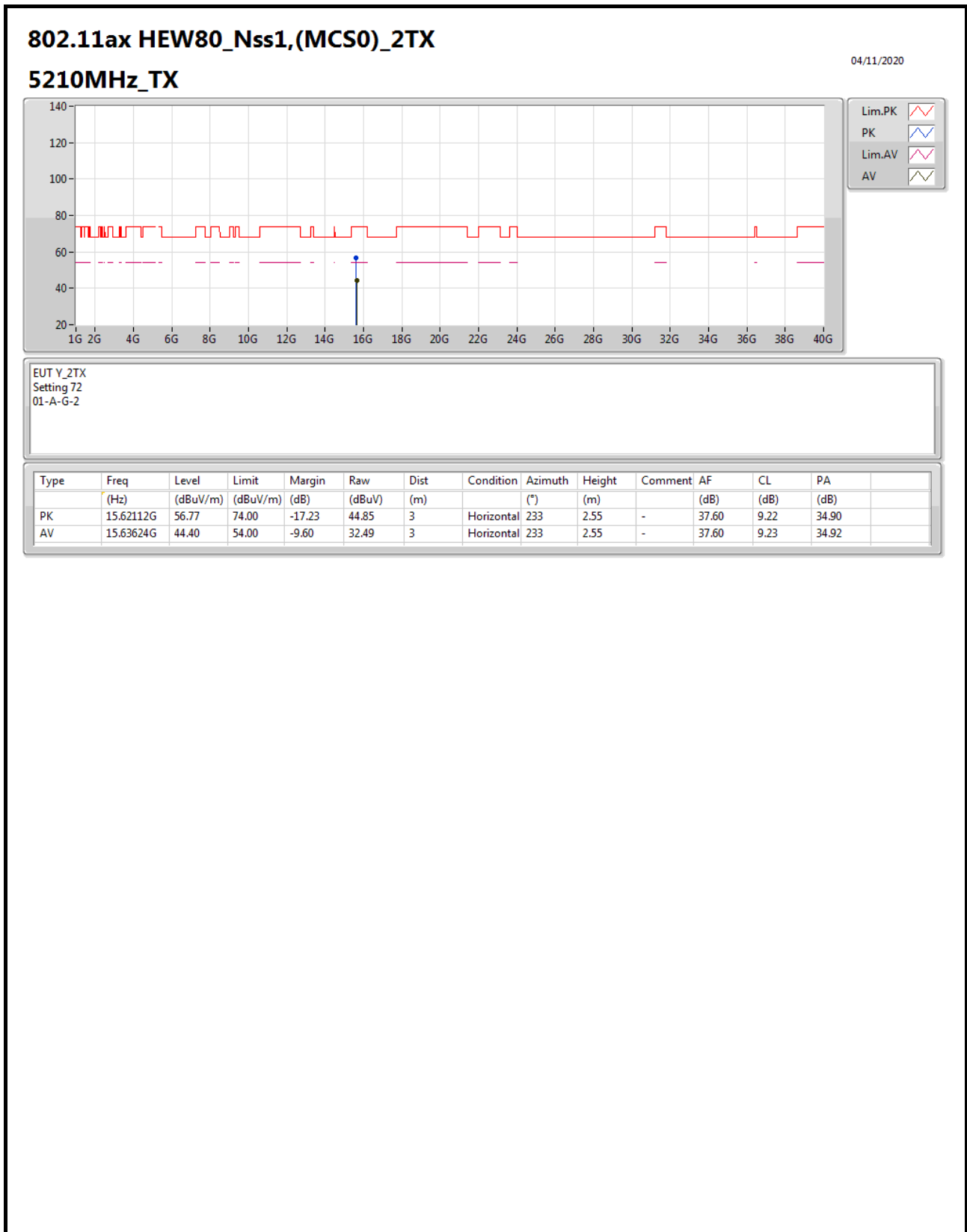


Test Mode: Mode 1



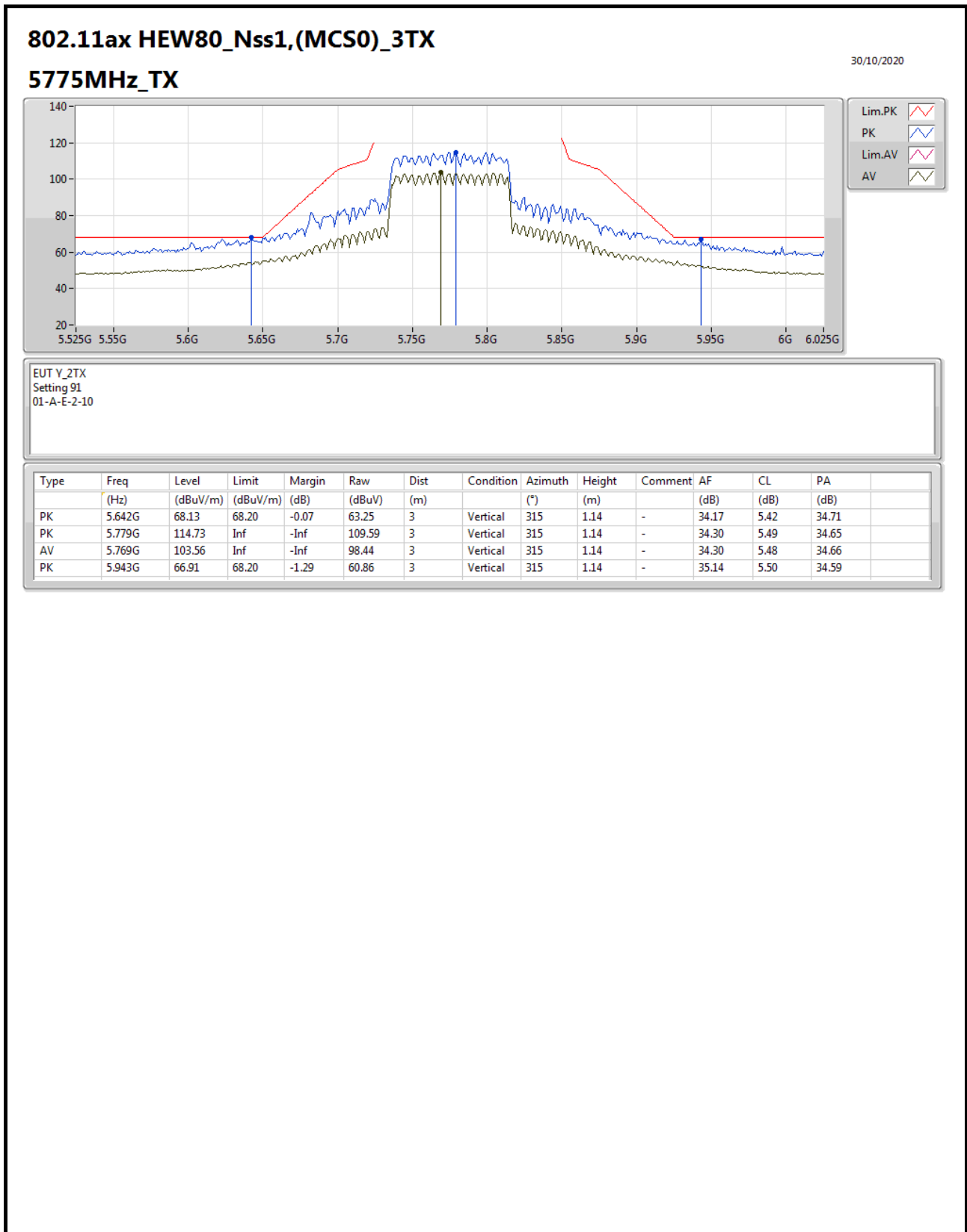


Test Mode: Mode 1





Test Mode: Mode 1



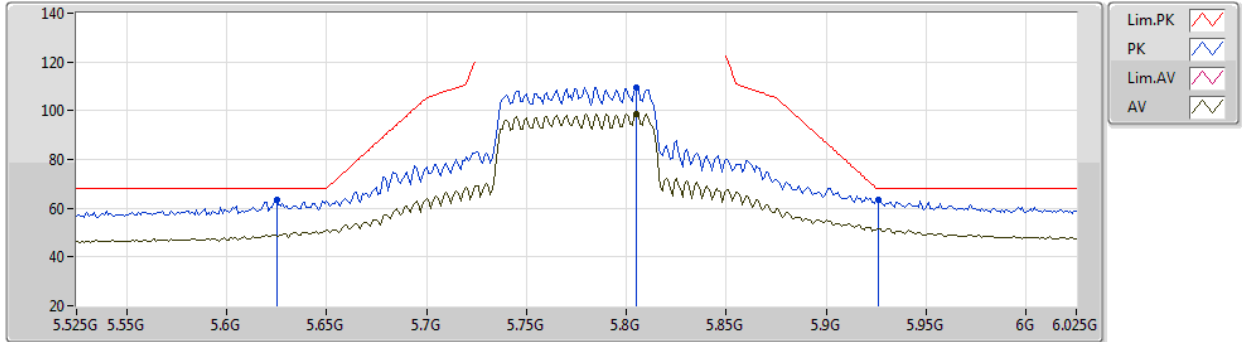


Test Mode: Mode 1

802.11ax HEW80_Nss1,(MCS0)_3TX

30/10/2020

5775MHz_TX

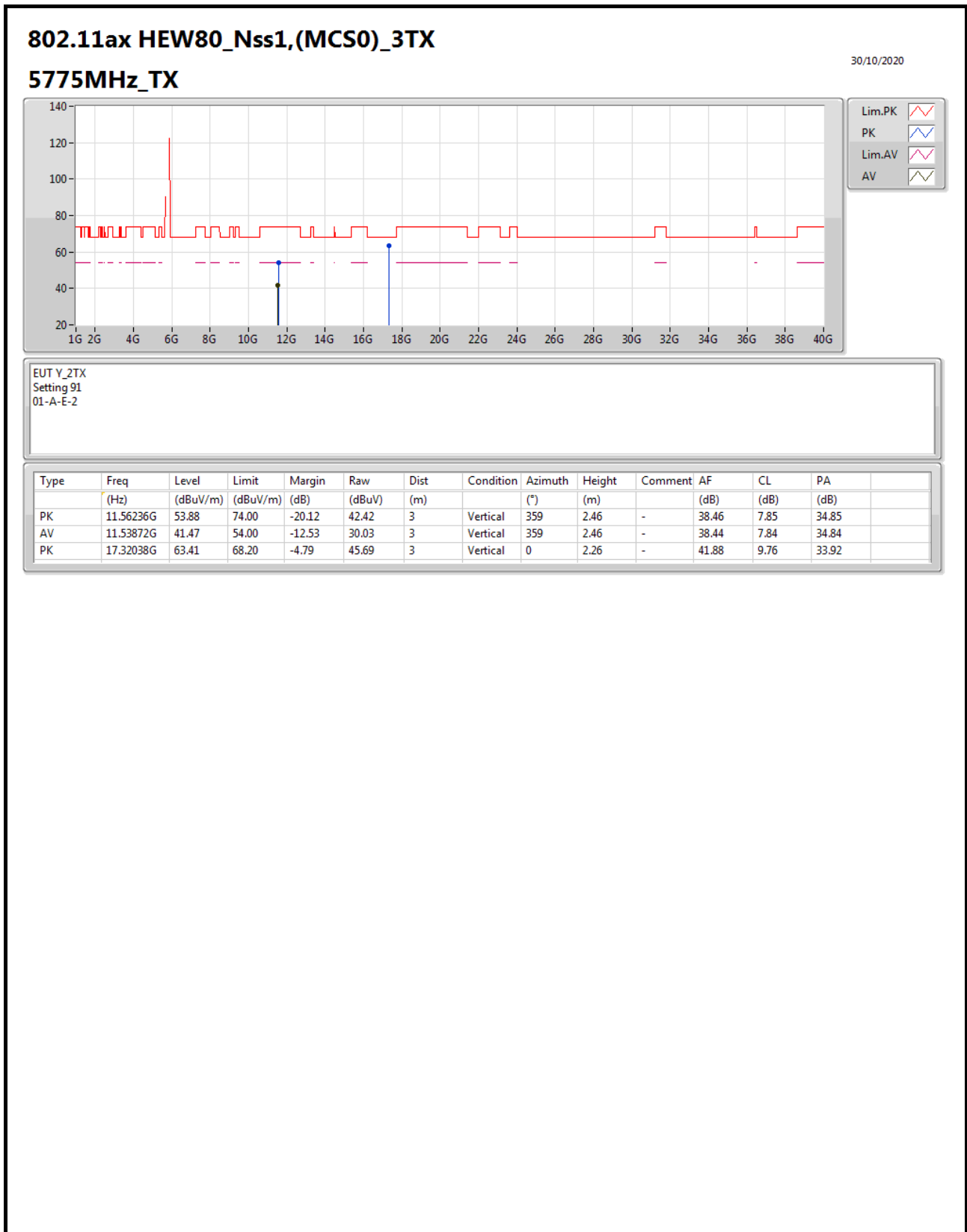


EUT_Y_2TX
Setting 91
01-A-E-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.625G	63.37	68.20	-4.83	58.57	3	Horizontal	170	2.60	-	34.10	5.41	34.71
PK	5.805G	109.70	Inf	-Inf	104.50	3	Horizontal	170	2.60	-	34.34	5.50	34.64
AV	5.805G	98.76	Inf	-Inf	93.56	3	Horizontal	170	2.60	-	34.34	5.50	34.64
PK	5.926G	63.60	68.20	-4.60	57.69	3	Horizontal	170	2.60	-	35.01	5.50	34.60

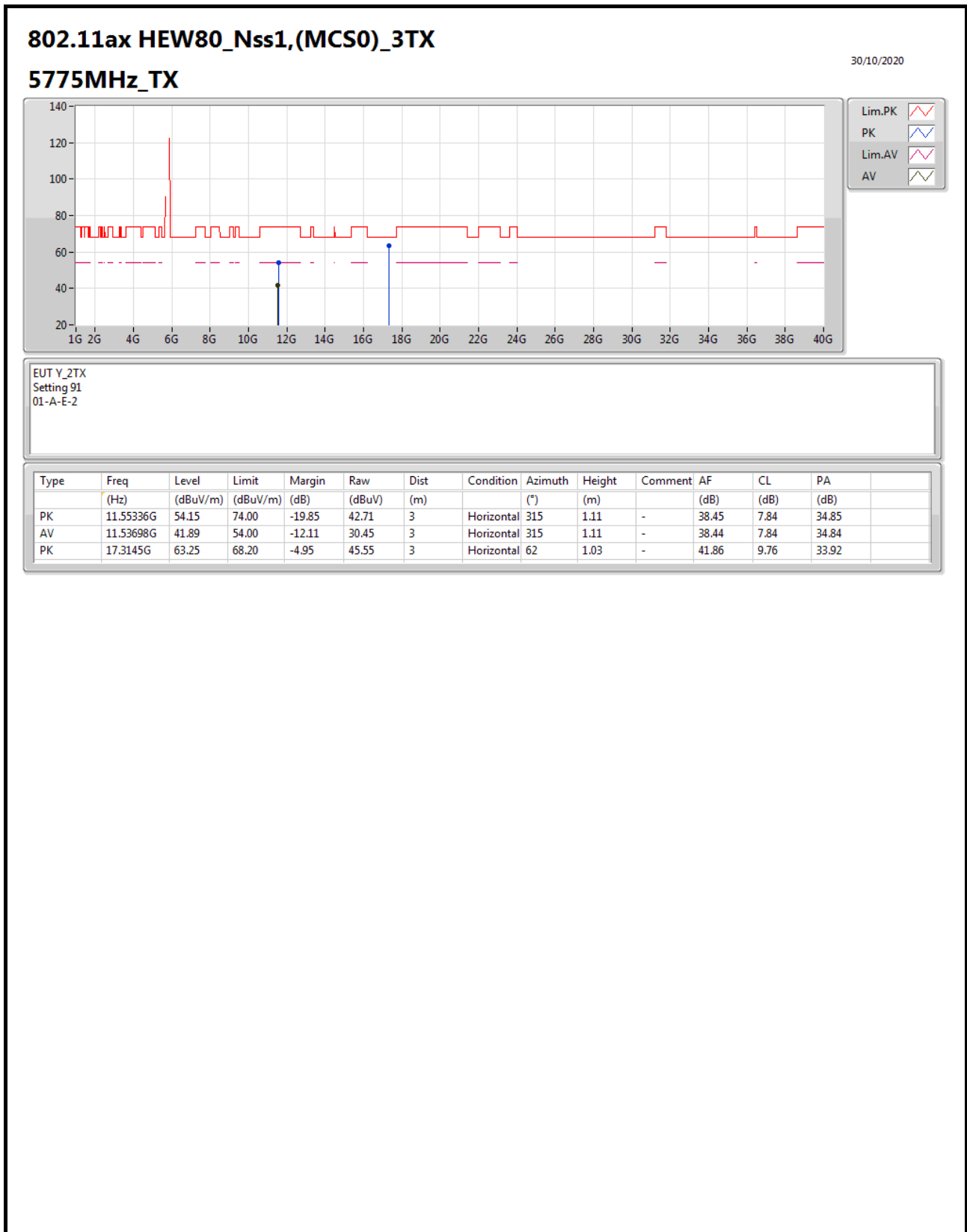


Test Mode: Mode 1





Test Mode: Mode 1





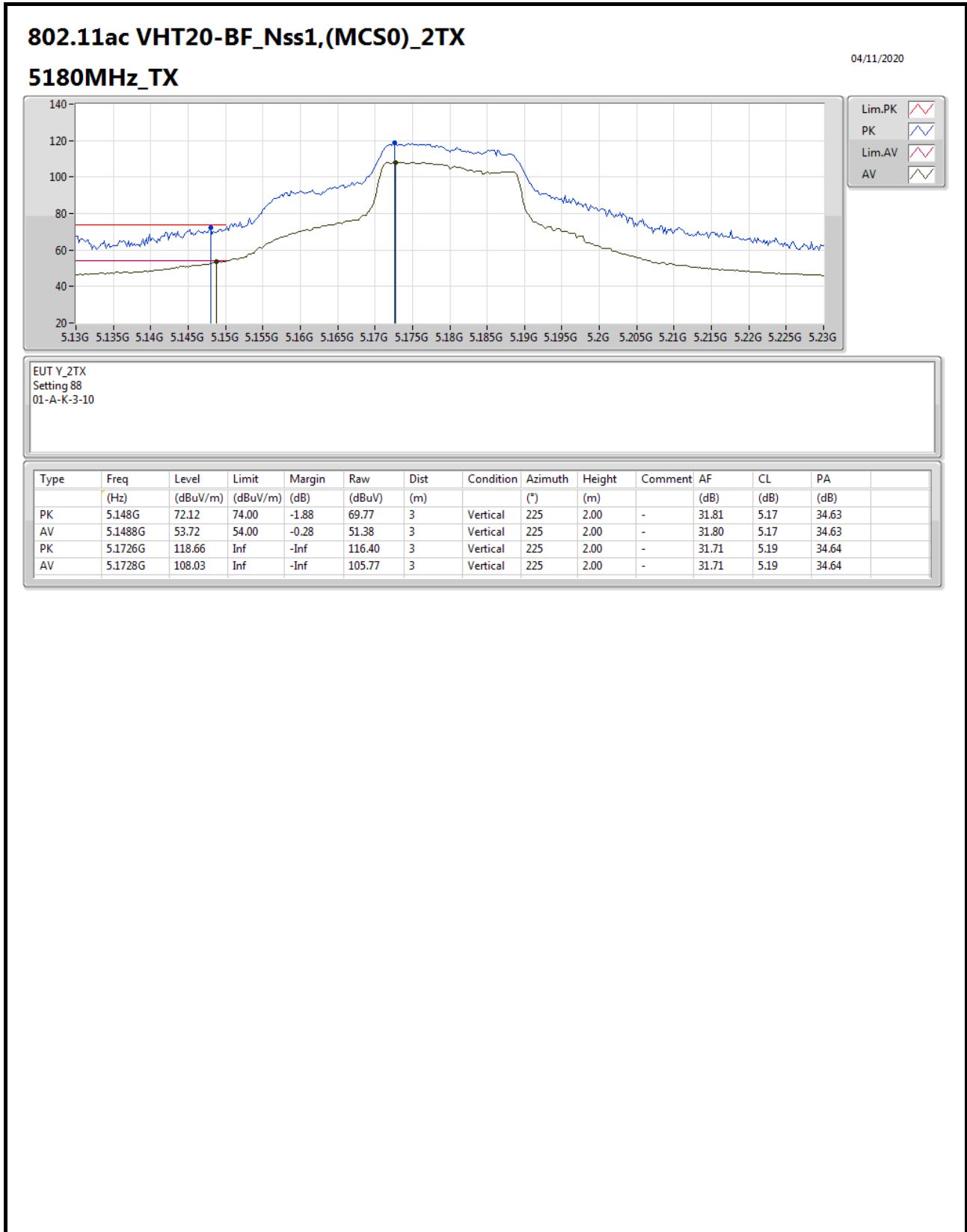
Test Mode: Mode 2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	AV	5.15G	53.98	54.00	-0.02	3	Vertical	90	1.71	-



Test Mode: Mode 2



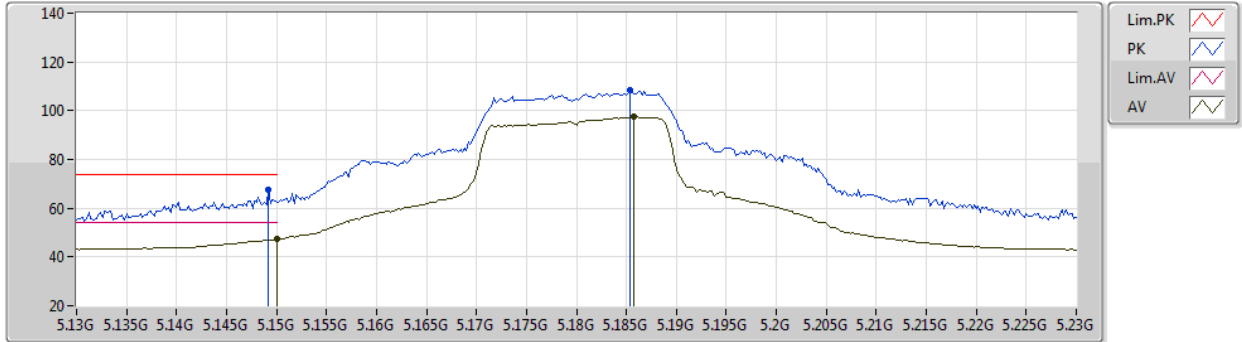


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5180MHz_TX

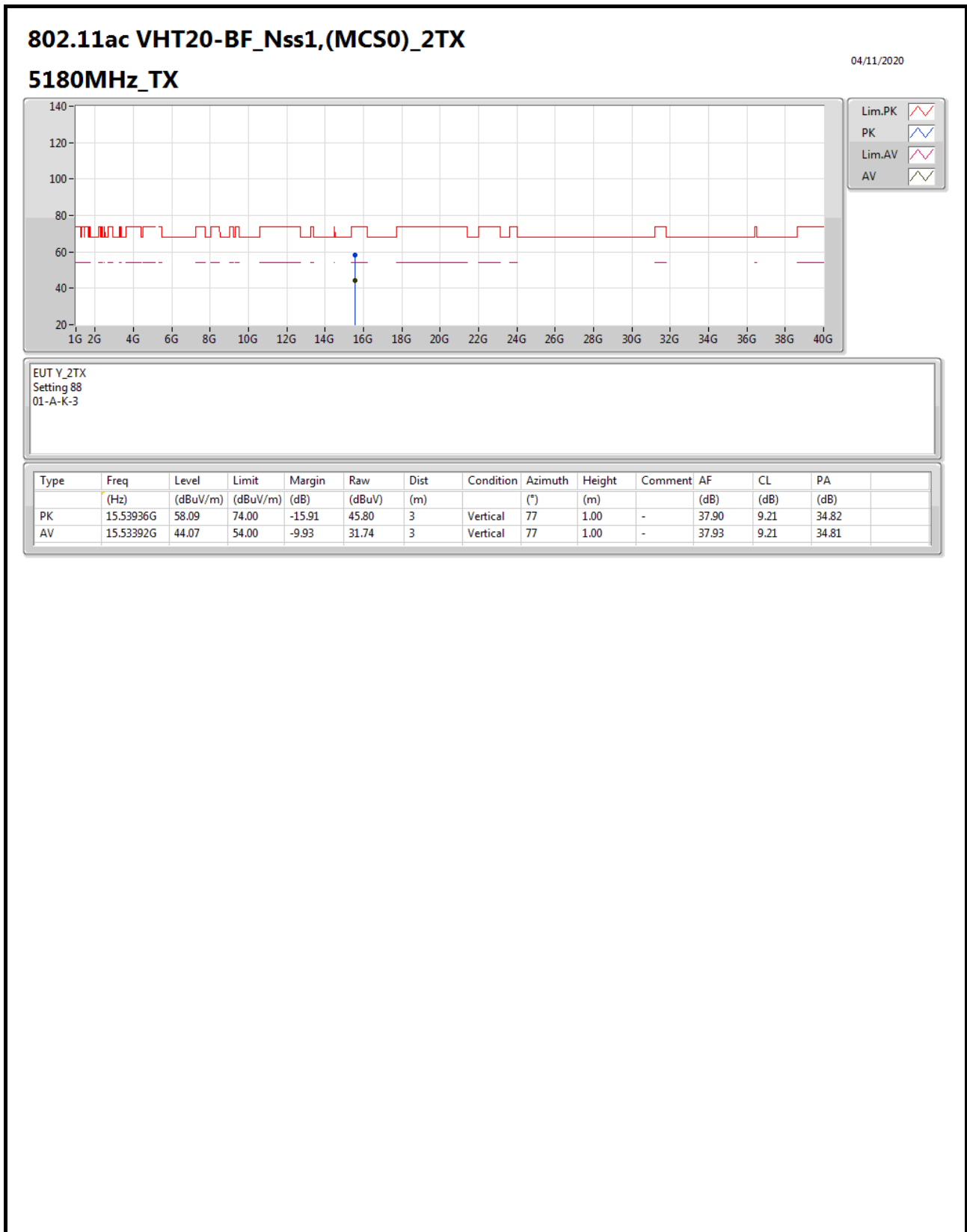


EUT_Y_2TX
Setting 88
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	67.79	74.00	-6.21	65.45	3	Horizontal	66	1.62	-	31.80	5.17	34.63
AV	5.15G	47.23	54.00	-6.77	44.89	3	Horizontal	66	1.62	-	31.80	5.17	34.63
PK	5.1854G	108.70	Inf	-Inf	106.50	3	Horizontal	66	1.62	-	31.66	5.19	34.65
AV	5.1858G	97.42	Inf	-Inf	95.22	3	Horizontal	66	1.62	-	31.66	5.19	34.65



Test Mode: Mode 2



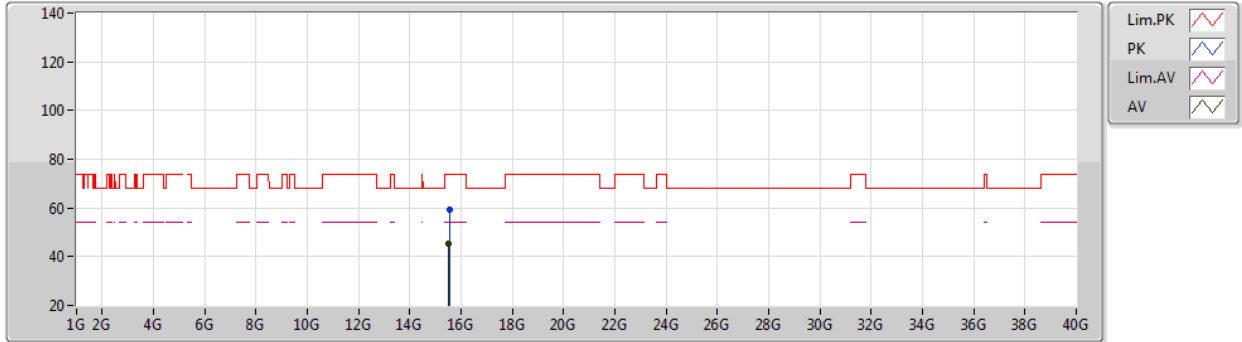


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5180MHz_TX



EUT Y_2TX
Setting 88
01-A-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.53664G	59.08	74.00	-14.92	46.77	3	Horizontal	138	2.54	-	37.92	9.21	34.82
AV	15.53216G	45.09	54.00	-8.91	32.75	3	Horizontal	138	2.54	-	37.94	9.21	34.81

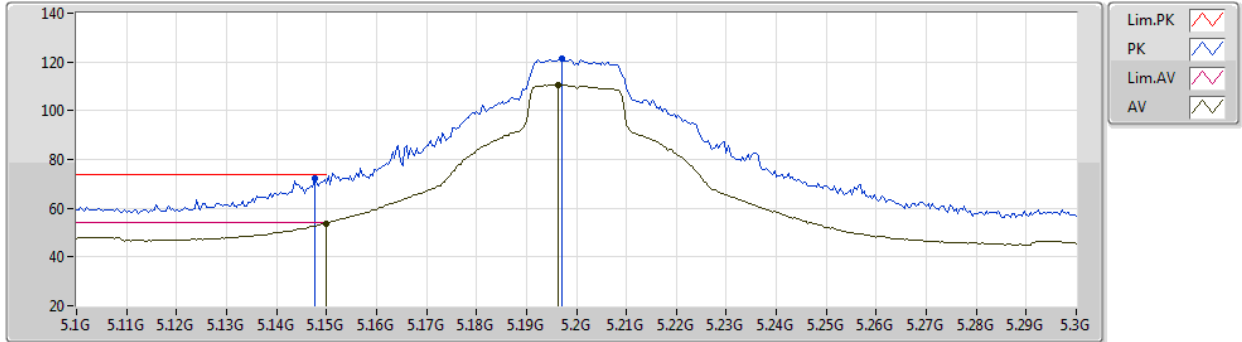


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5200MHz_TX



EUT Y_2TX
Setting 100
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1476G	72.32	74.00	-1.68	69.97	3	Vertical	91	1.84	-	31.81	5.17	34.63
AV	5.15G	53.84	54.00	-0.16	51.50	3	Vertical	91	1.84	-	31.80	5.17	34.63
PK	5.1972G	121.17	Inf	-Inf	119.01	3	Vertical	91	1.84	-	31.61	5.20	34.65
AV	5.1964G	110.52	Inf	-Inf	108.36	3	Vertical	91	1.84	-	31.61	5.20	34.65

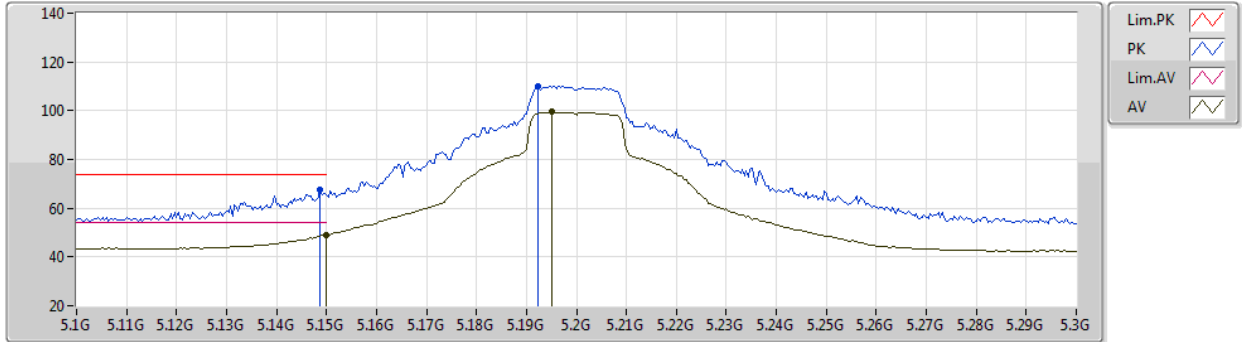


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5200MHz_TX

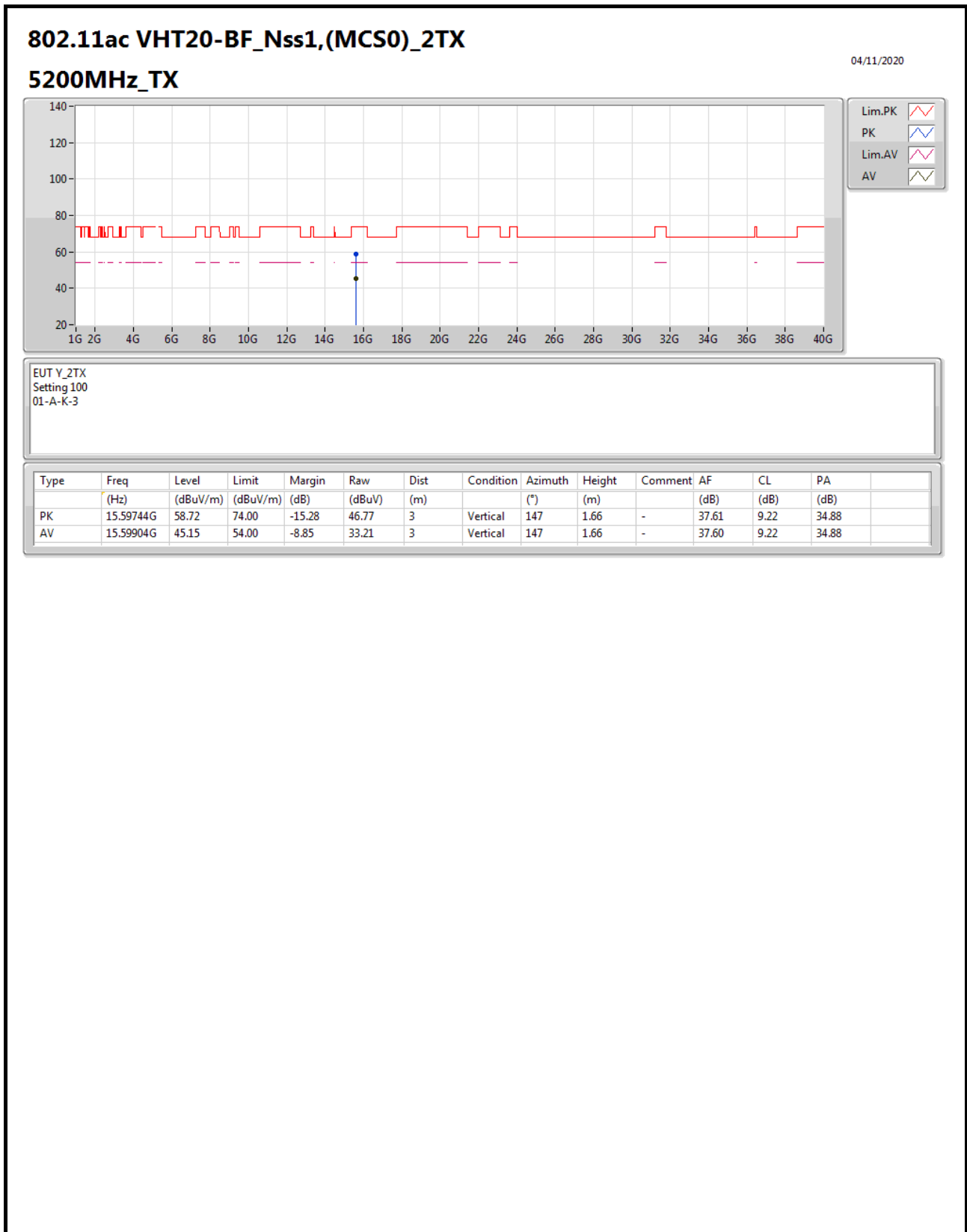


EUT Y_2TX
Setting 100
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1488G	67.43	74.00	-6.57	65.09	3	Horizontal	82	1.80	-	31.80	5.17	34.63
AV	5.15G	49.00	54.00	-5.00	46.66	3	Horizontal	82	1.80	-	31.80	5.17	34.63
PK	5.1924G	110.17	Inf	-Inf	107.99	3	Horizontal	82	1.80	-	31.63	5.20	34.65
AV	5.1952G	99.53	Inf	-Inf	97.36	3	Horizontal	82	1.80	-	31.62	5.20	34.65

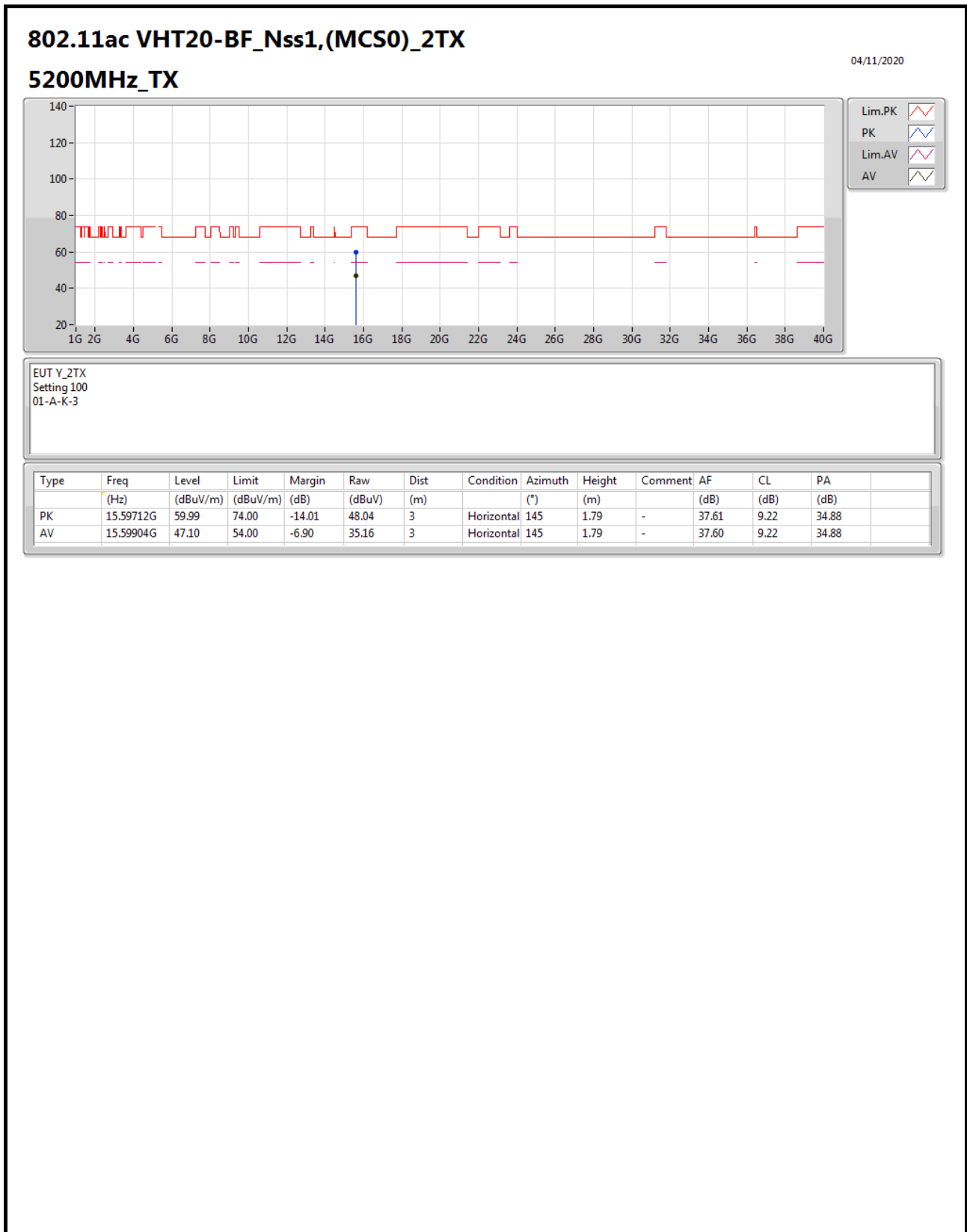


Test Mode: Mode 2





Test Mode: Mode 2



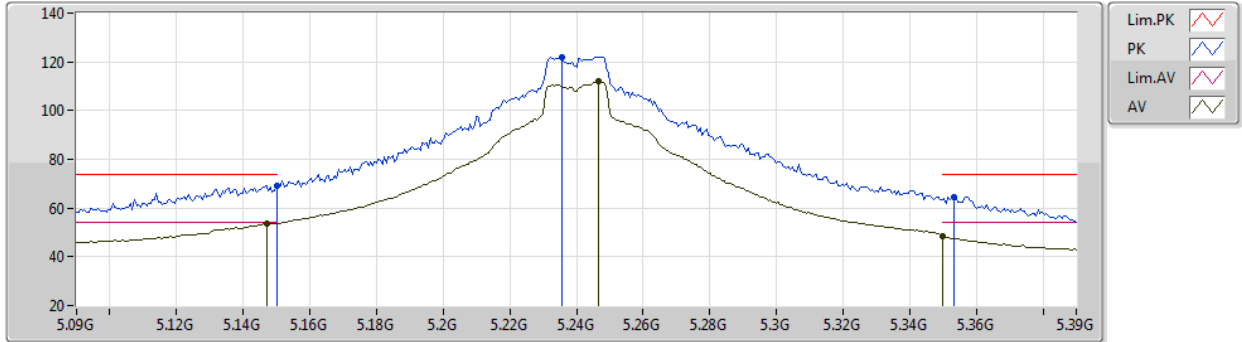


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5240MHz_TX



EUT_Y_2TX
Setting 105
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	69.12	74.00	-4.88	66.78	3	Vertical	224	1.80	-	31.80	5.17	34.63
AV	5.147G	53.75	54.00	-0.25	51.40	3	Vertical	224	1.80	-	31.81	5.17	34.63
PK	5.2358G	121.89	Inf	-Inf	119.85	3	Vertical	224	1.80	-	31.46	5.24	34.66
AV	5.2466G	111.89	Inf	-Inf	109.90	3	Vertical	224	1.80	-	31.41	5.25	34.67
PK	5.3534G	64.71	74.00	-9.29	62.74	3	Vertical	224	1.80	-	31.33	5.35	34.71
AV	5.35G	48.33	54.00	-5.67	46.39	3	Vertical	224	1.80	-	31.30	5.35	34.71

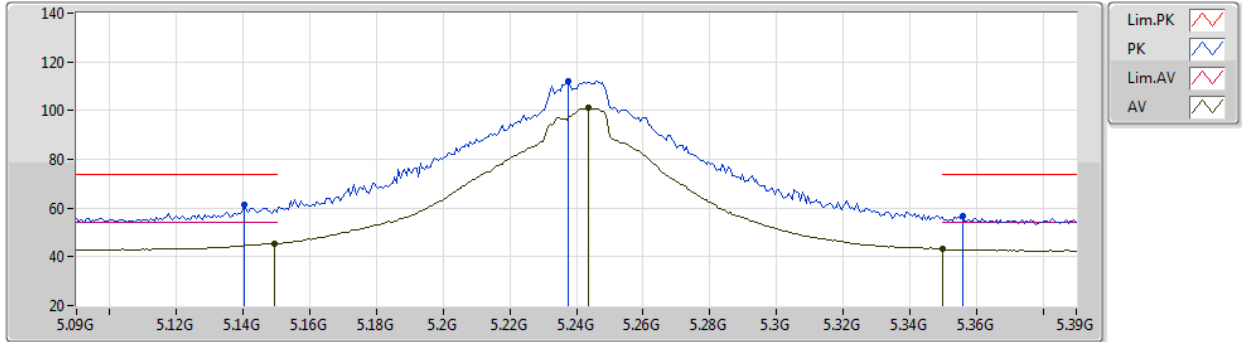


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_2TX

04/11/2020

5240MHz_TX

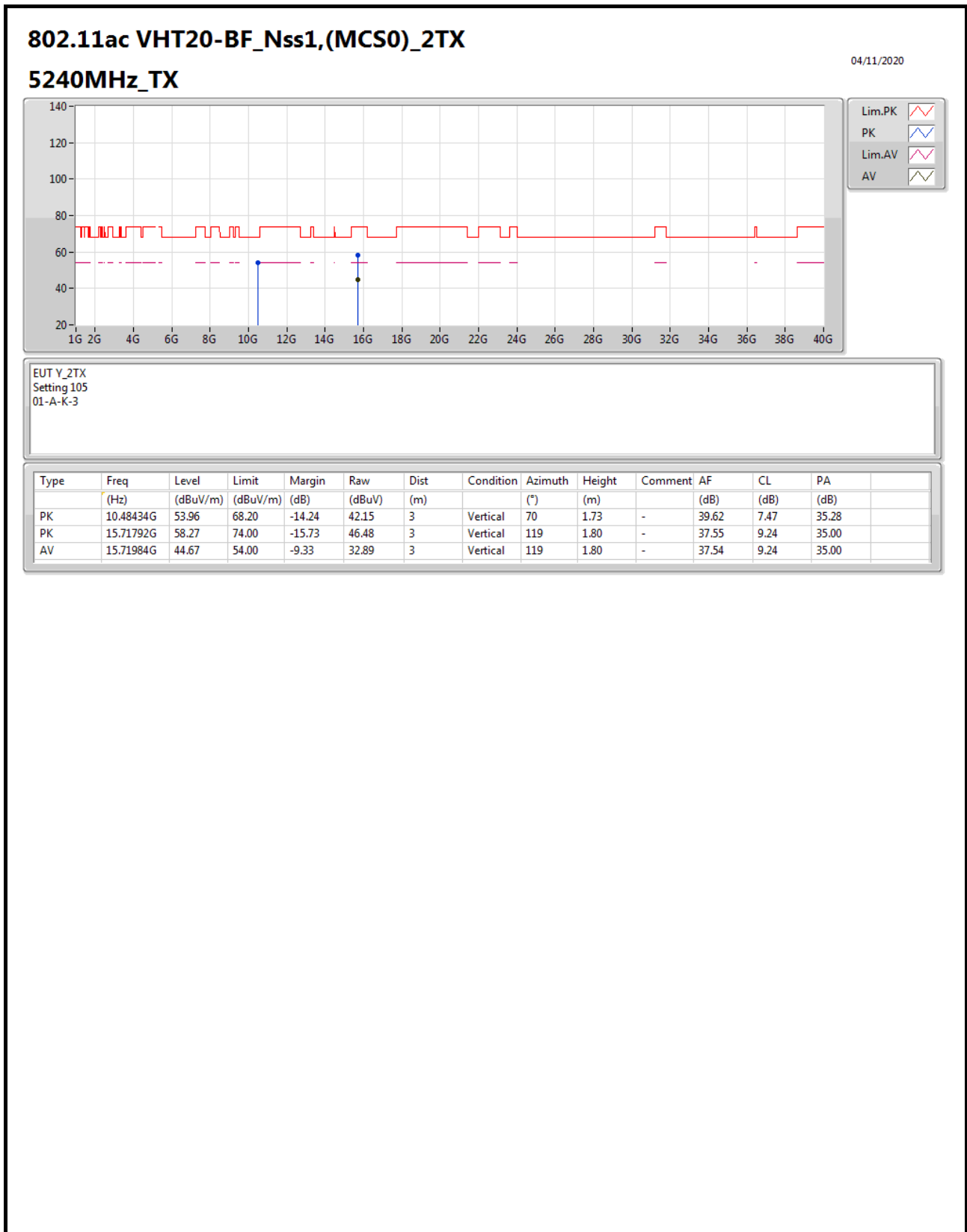


EUT_Y_2TX
Setting 105
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1404G	61.20	74.00	-12.80	58.82	3	Horizontal	70	1.94	-	31.84	5.17	34.63
AV	5.1494G	45.37	54.00	-8.63	43.03	3	Horizontal	70	1.94	-	31.80	5.17	34.63
PK	5.2376G	112.04	Inf	-Inf	110.02	3	Horizontal	70	1.94	-	31.45	5.24	34.67
AV	5.2436G	100.96	Inf	-Inf	98.96	3	Horizontal	70	1.94	-	31.43	5.24	34.67
PK	5.3558G	56.97	74.00	-17.03	54.97	3	Horizontal	70	1.94	-	31.35	5.36	34.71
AV	5.35G	43.02	54.00	-10.98	41.08	3	Horizontal	70	1.94	-	31.30	5.35	34.71

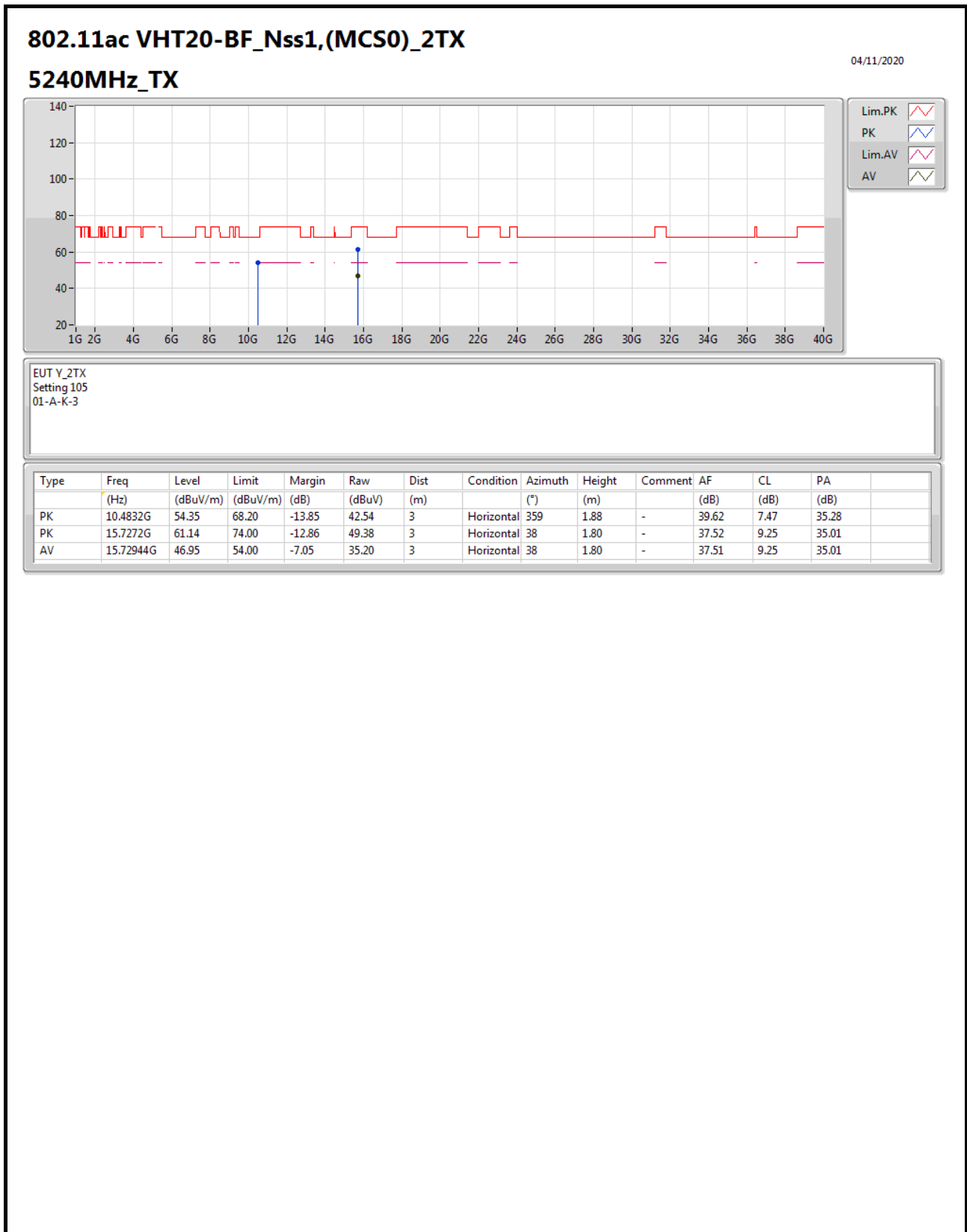


Test Mode: Mode 2





Test Mode: Mode 2



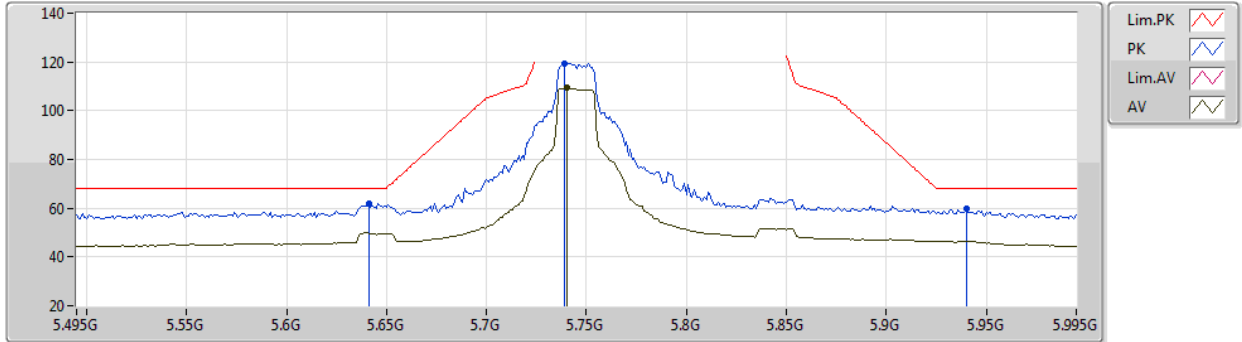


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5745MHz_TX



EUT V_3TX
Setting 96
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.641G	61.82	68.20	-6.38	59.51	3	Vertical	62	1.23	-	31.60	5.42	34.71
PK	5.739G	119.46	Inf	-Inf	116.78	3	Vertical	62	1.23	-	31.88	5.47	34.67
AV	5.74G	109.33	Inf	-Inf	106.65	3	Vertical	62	1.23	-	31.88	5.47	34.67
PK	5.94G	59.60	68.20	-8.60	56.43	3	Vertical	62	1.23	-	32.26	5.50	34.59

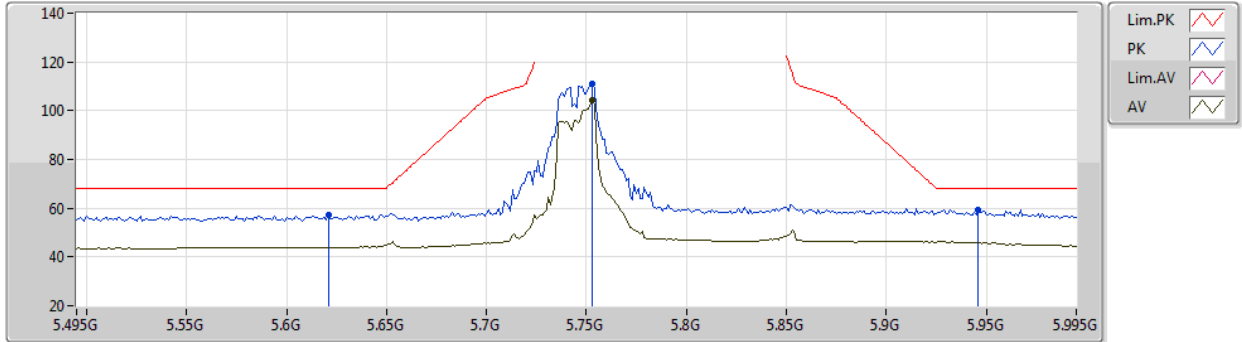


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5745MHz_TX

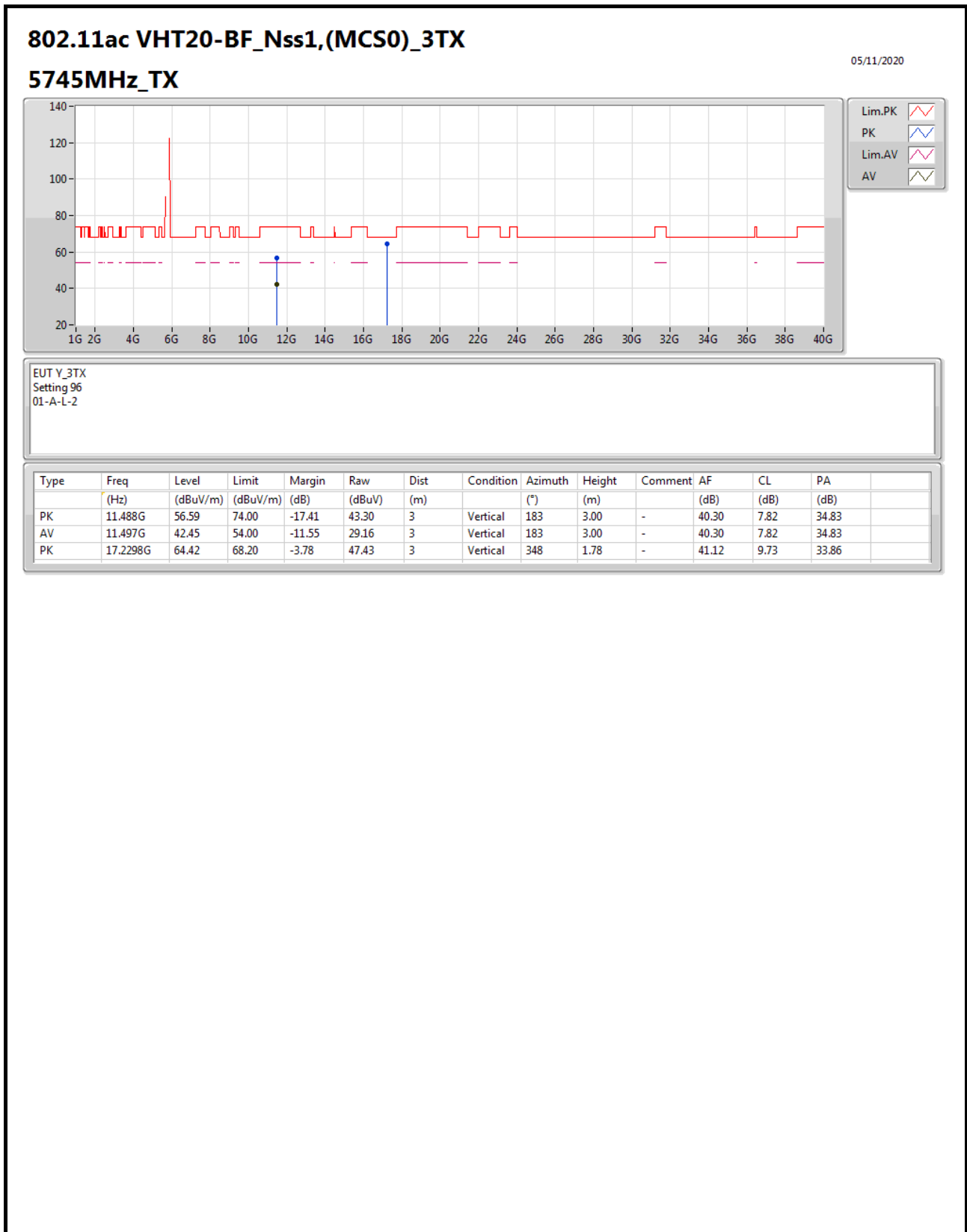


EUT_V_3TX
Setting 96
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.621G	57.37	68.20	-10.83	55.07	3	Horizontal	185	1.56	-	31.60	5.41	34.71
PK	5.753G	110.99	Inf	-Inf	108.27	3	Horizontal	185	1.56	-	31.90	5.48	34.66
AV	5.753G	104.34	Inf	-Inf	101.62	3	Horizontal	185	1.56	-	31.90	5.48	34.66
PK	5.946G	59.49	68.20	-8.71	56.30	3	Horizontal	185	1.56	-	32.28	5.50	34.59



Test Mode: Mode 2



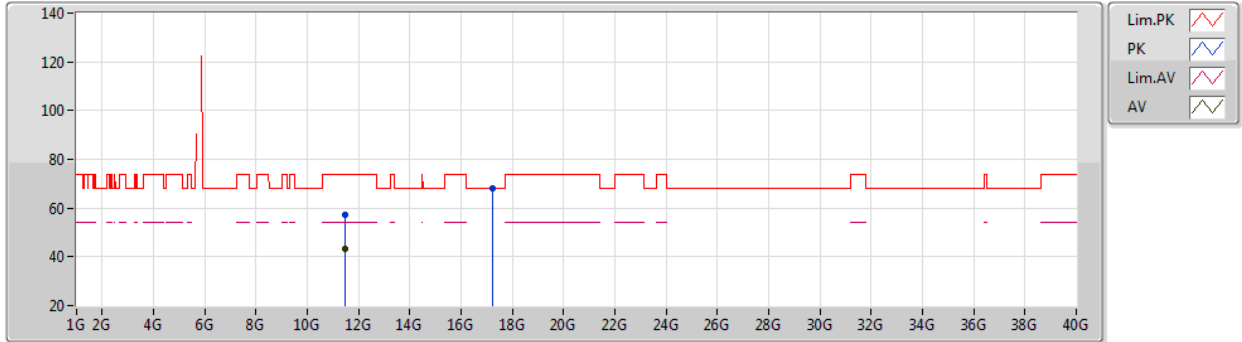


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5745MHz_TX



EUT V_3TX
Setting 96
01-A-L-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.4898G	57.44	74.00	-16.56	44.15	3	Horizontal	341	1.80	-	40.30	7.82	34.83
AV	11.49056G	43.26	54.00	-10.74	29.97	3	Horizontal	341	1.80	-	40.30	7.82	34.83
PK	17.22692G	68.06	68.20	-0.14	51.07	3	Horizontal	328	1.93	-	41.11	9.73	33.85

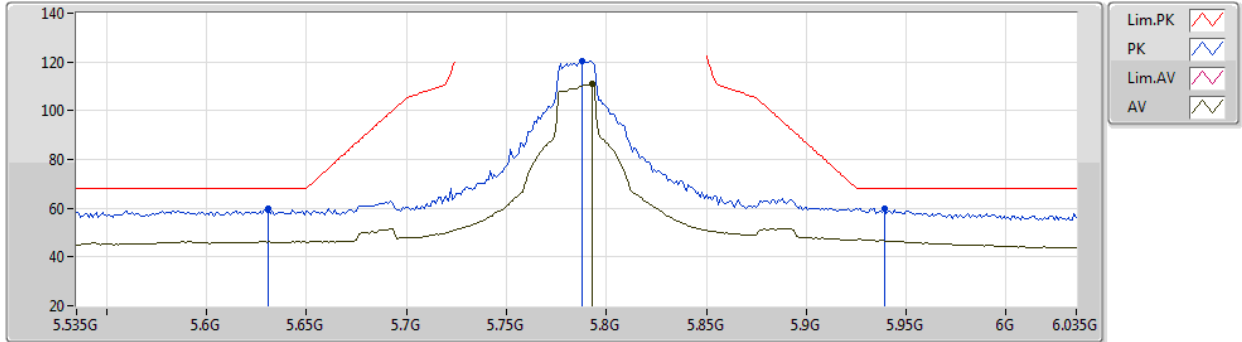


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5785MHz_TX



EUT V_3TX
Setting 99
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.631G	59.82	68.20	-8.38	57.51	3	Vertical	68	1.16	-	31.60	5.42	34.71
PK	5.788G	120.60	Inf	-Inf	117.86	3	Vertical	68	1.16	-	31.90	5.49	34.65
AV	5.793G	111.00	Inf	-Inf	108.25	3	Vertical	68	1.16	-	31.90	5.50	34.65
PK	5.939G	60.06	68.20	-8.14	56.89	3	Vertical	68	1.16	-	32.26	5.50	34.59

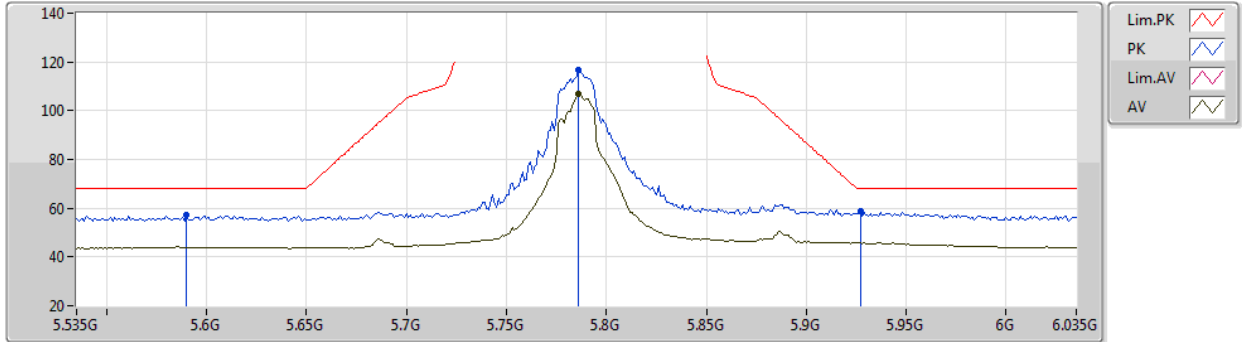


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5785MHz_TX

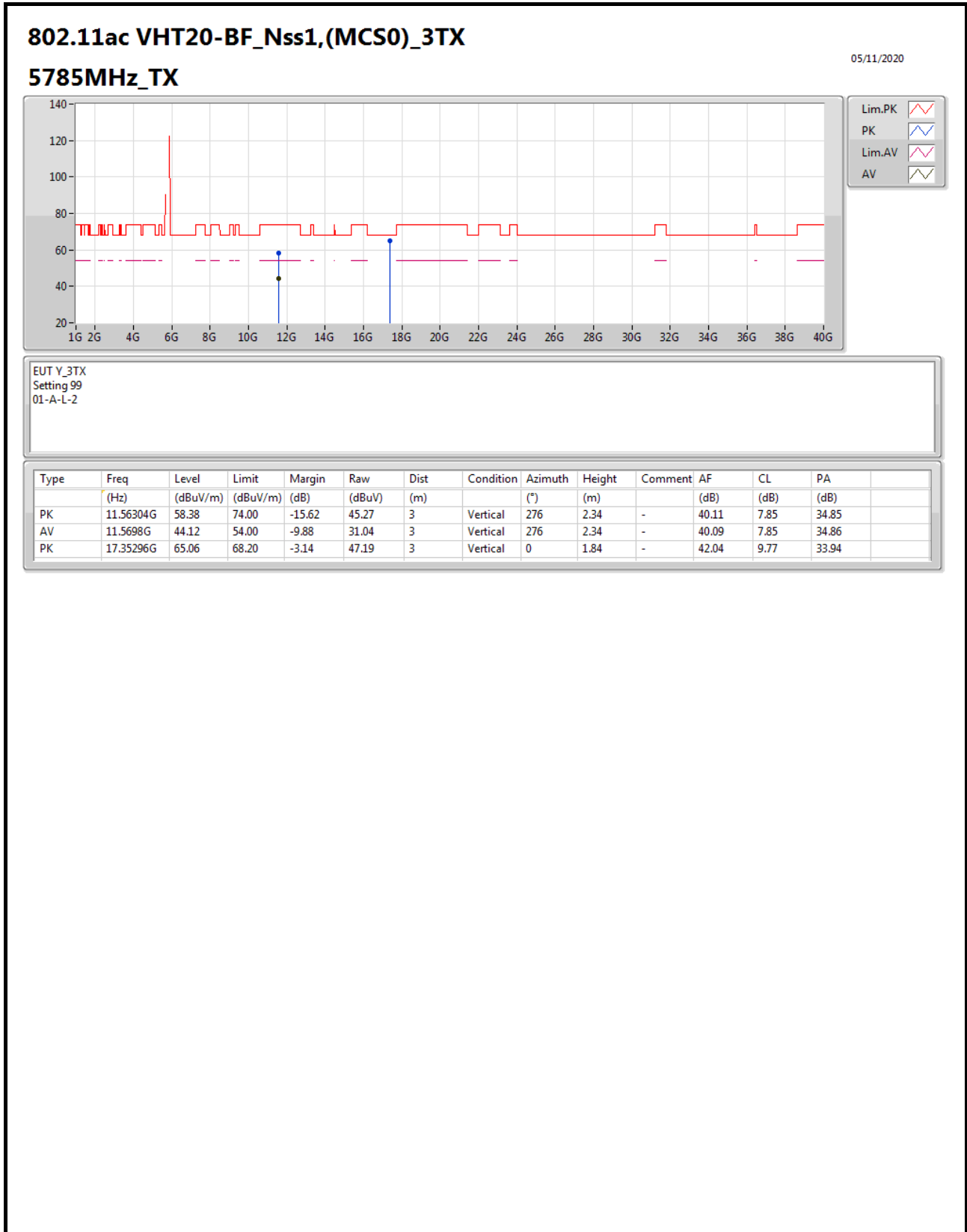


EUT_V_3TX
Setting 99
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.59G	57.19	68.20	-11.01	54.92	3	Horizontal	159	1.63	-	31.60	5.40	34.73
PK	5.786G	116.66	Inf	-Inf	113.92	3	Horizontal	159	1.63	-	31.90	5.49	34.65
AV	5.786G	107.07	Inf	-Inf	104.33	3	Horizontal	159	1.63	-	31.90	5.49	34.65
PK	5.927G	58.61	68.20	-9.59	55.50	3	Horizontal	159	1.63	-	32.21	5.50	34.60

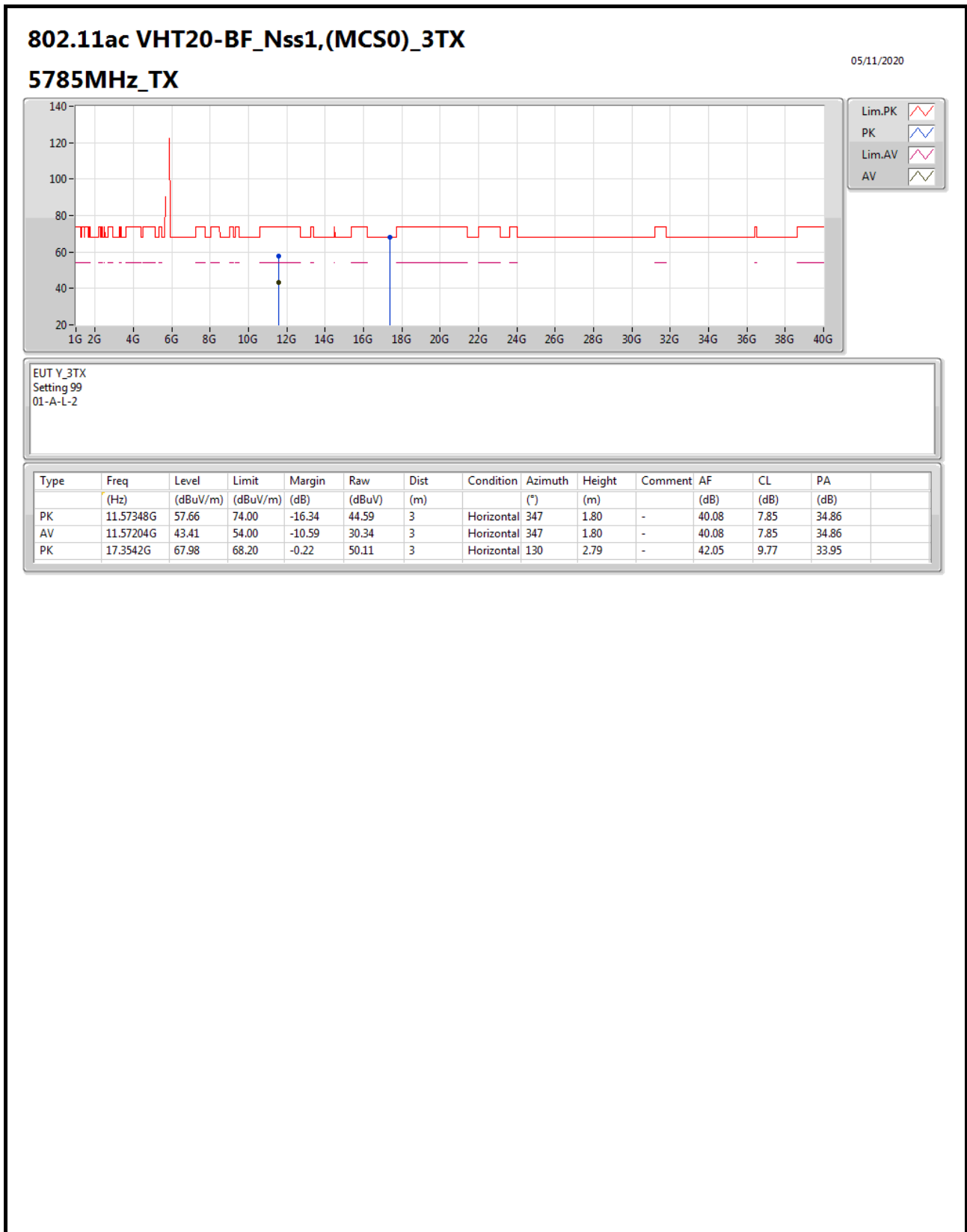


Test Mode: Mode 2





Test Mode: Mode 2



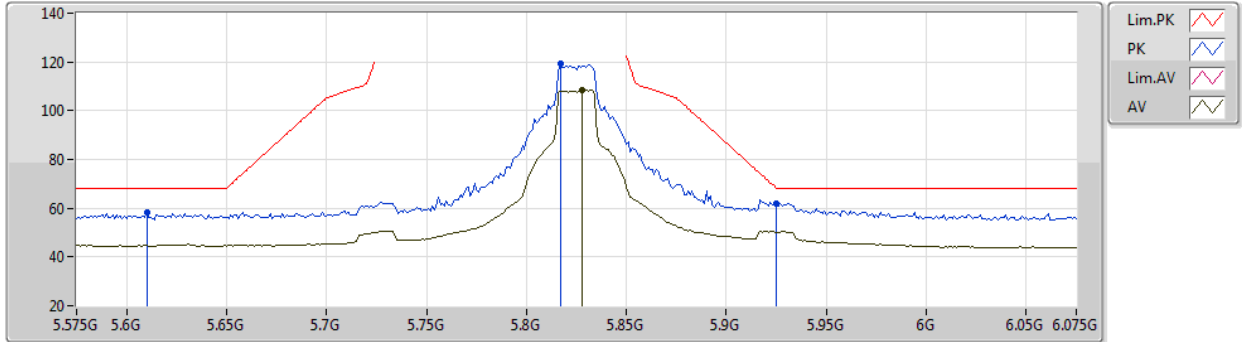


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5825MHz_TX



EUT_V_3TX
Setting 97
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.61G	58.53	68.20	-9.67	56.24	3	Vertical	71	1.27	-	31.60	5.41	34.72
PK	5.817G	119.10	Inf	-Inf	116.27	3	Vertical	71	1.27	-	31.97	5.50	34.64
AV	5.828G	108.38	Inf	-Inf	105.51	3	Vertical	71	1.27	-	32.01	5.50	34.64
PK	5.925G	62.11	68.20	-6.09	59.01	3	Vertical	71	1.27	-	32.20	5.50	34.60

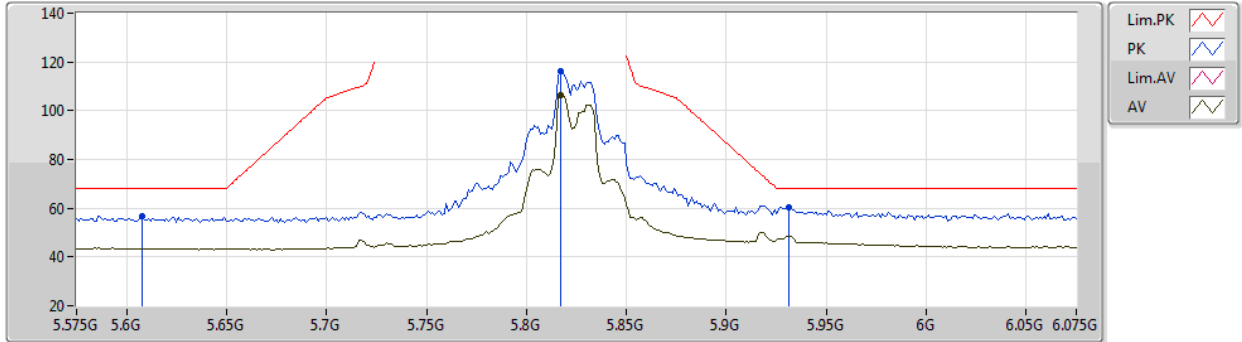


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5825MHz_TX



EUT_V_3TX
Setting 97
01-A-L-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.608G	56.64	68.20	-11.56	54.36	3	Horizontal	247	2.01	-	31.60	5.40	34.72
PK	5.817G	116.06	Inf	-Inf	113.23	3	Horizontal	247	2.01	-	31.97	5.50	34.64
AV	5.817G	106.51	Inf	-Inf	103.68	3	Horizontal	247	2.01	-	31.97	5.50	34.64
PK	5.931G	60.50	68.20	-7.70	57.38	3	Horizontal	247	2.01	-	32.22	5.50	34.60

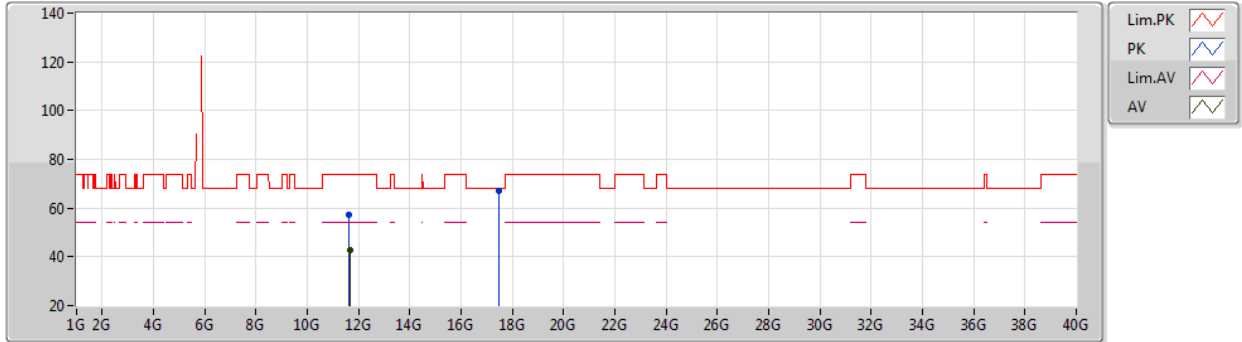


Test Mode: Mode 2

802.11ac VHT20-BF_Nss1,(MCS0)_3TX

05/11/2020

5825MHz_TX

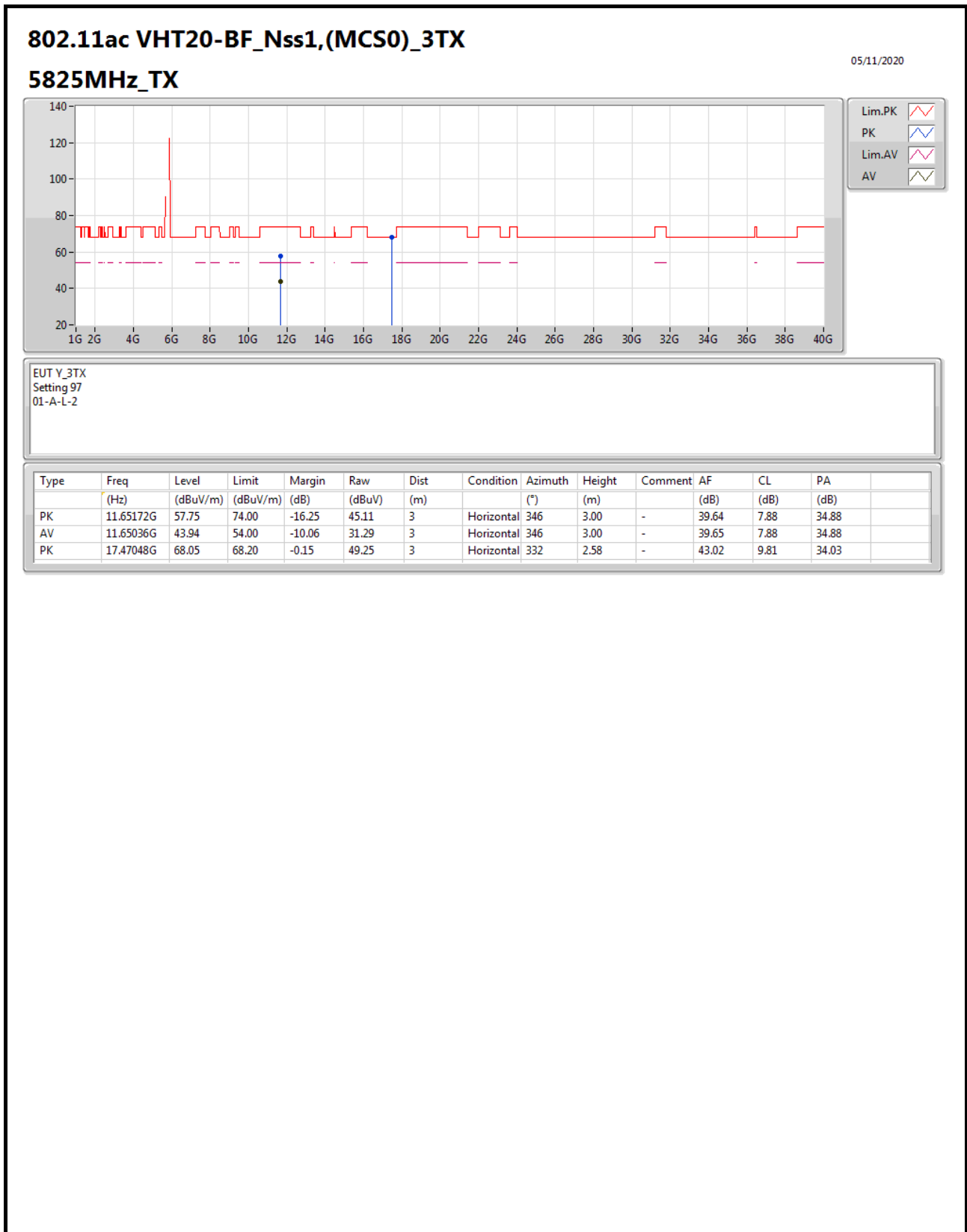


EUT V_3TX
Setting 97
01-A-L-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.64312G	57.16	74.00	-16.84	44.46	3	Vertical	262	2.50	-	39.70	7.88	34.88
AV	11.65108G	42.95	54.00	-11.05	30.31	3	Vertical	262	2.50	-	39.64	7.88	34.88
PK	17.46736G	67.03	68.20	-1.17	48.25	3	Vertical	244	2.01	-	43.00	9.81	34.03



Test Mode: Mode 2



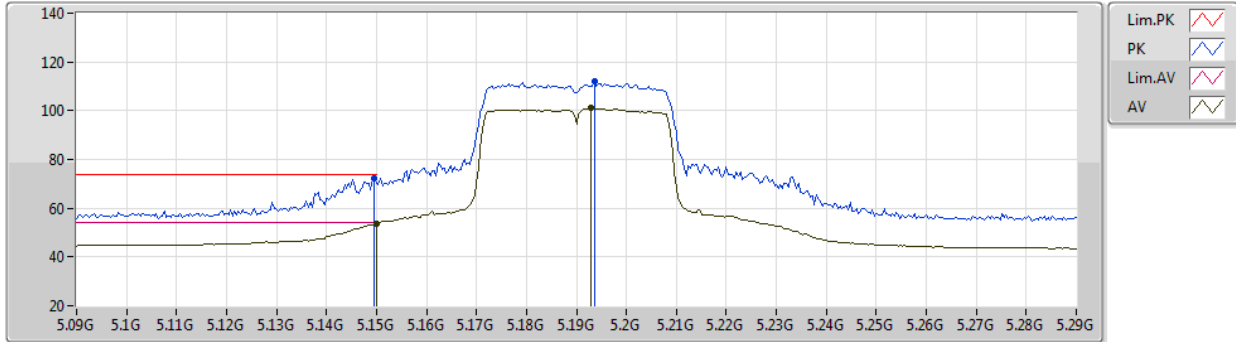


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5190MHz_TX



EUT_Y_2TX
Setting 73
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	72.31	74.00	-1.69	69.97	3	Vertical	207	1.80	-	31.80	5.17	34.63
AV	5.15G	53.87	54.00	-0.13	51.53	3	Vertical	207	1.80	-	31.80	5.17	34.63
PK	5.1936G	111.90	Inf	-Inf	109.72	3	Vertical	207	1.80	-	31.63	5.20	34.65
AV	5.1928G	101.13	Inf	-Inf	98.95	3	Vertical	207	1.80	-	31.63	5.20	34.65

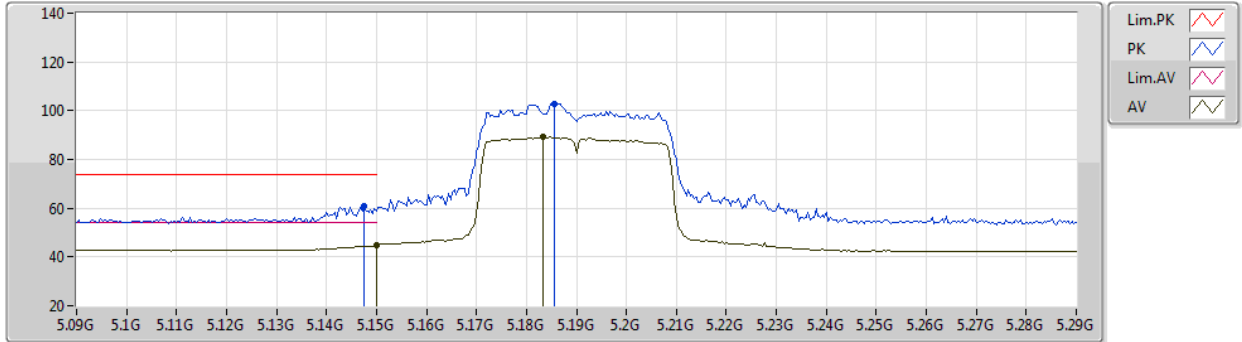


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5190MHz_TX



EUT_Y_2TX
Setting 73
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1476G	60.70	74.00	-13.30	58.35	3	Horizontal	78	2.49	-	31.81	5.17	34.63
AV	5.15G	44.80	54.00	-9.20	42.46	3	Horizontal	78	2.49	-	31.80	5.17	34.63
PK	5.1856G	102.92	Inf	-Inf	100.72	3	Horizontal	78	2.49	-	31.66	5.19	34.65
AV	5.1832G	89.30	Inf	-Inf	87.09	3	Horizontal	78	2.49	-	31.67	5.19	34.65

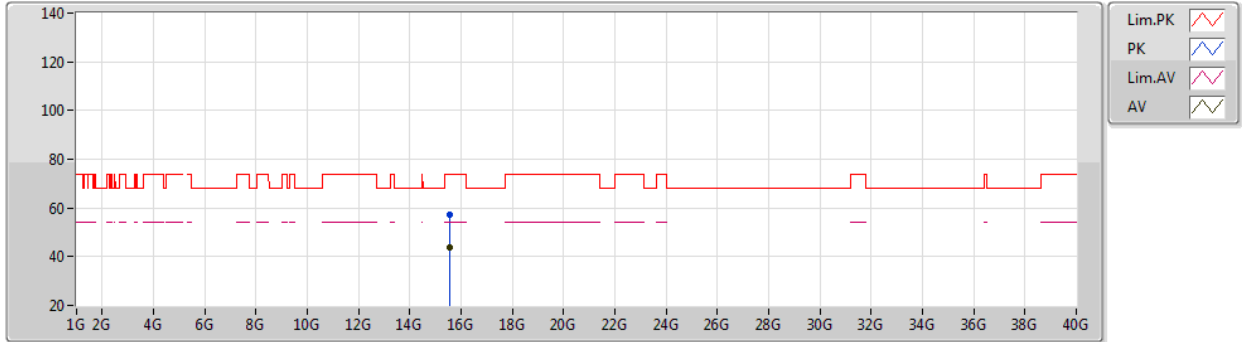


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5190MHz_TX



EUT_Y_2TX
Setting 73
01-A-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.56658G	57.47	74.00	-16.53	45.34	3	Vertical	77	1.55	-	37.77	9.21	34.85
AV	15.56516G	43.72	54.00	-10.28	31.59	3	Vertical	77	1.55	-	37.77	9.21	34.85

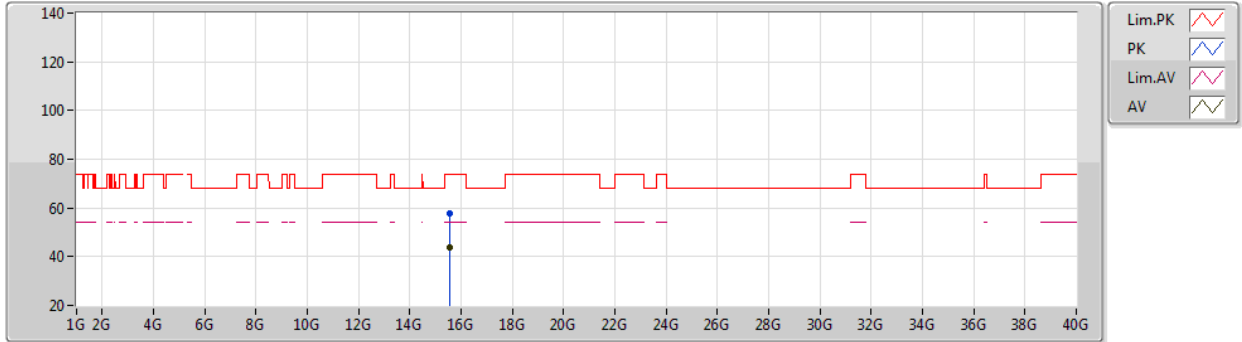


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5190MHz_TX



EUT Y_2TX
Setting 73
01-A-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.57216G	57.55	74.00	-16.45	45.45	3	Horizontal	350	1.80	-	37.74	9.21	34.85
AV	15.57356G	43.69	54.00	-10.31	31.61	3	Horizontal	350	1.80	-	37.73	9.21	34.86

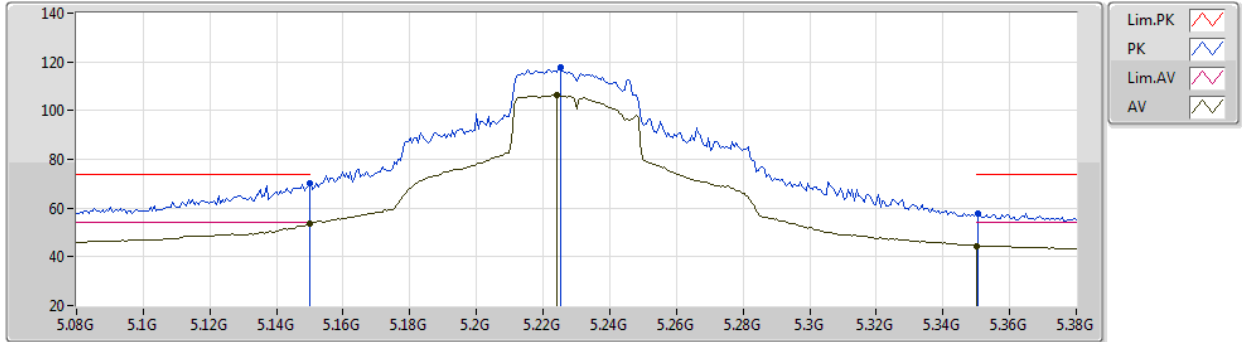


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5230MHz_TX



EUT_Y_2TX
Setting 97
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	70.43	74.00	-3.57	68.09	3	Vertical	220	1.69	-	31.80	5.17	34.63
AV	5.15G	53.63	54.00	-0.37	51.29	3	Vertical	220	1.69	-	31.80	5.17	34.63
PK	5.2252G	117.71	Inf	-Inf	115.64	3	Vertical	220	1.69	-	31.50	5.23	34.66
AV	5.224G	106.29	Inf	-Inf	104.23	3	Vertical	220	1.69	-	31.50	5.22	34.66
PK	5.3506G	57.95	74.00	-16.05	56.01	3	Vertical	220	1.69	-	31.30	5.35	34.71
AV	5.35G	44.51	54.00	-9.49	42.57	3	Vertical	220	1.69	-	31.30	5.35	34.71

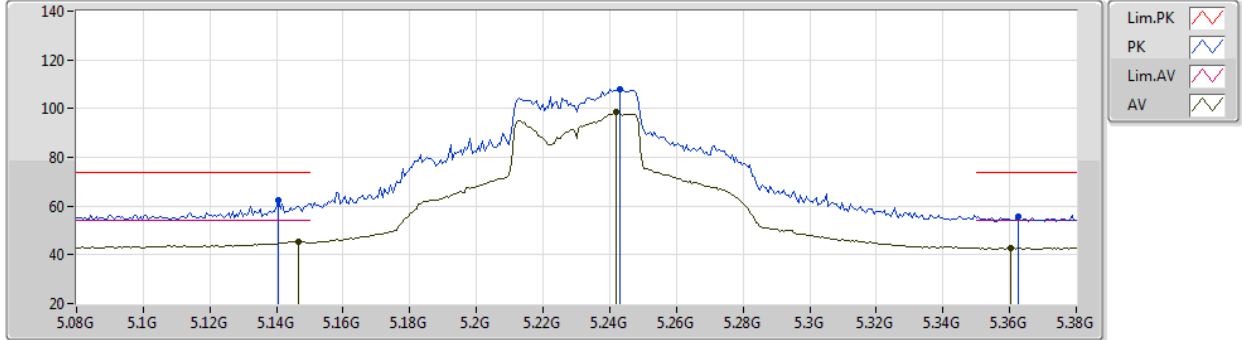


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_2TX

04/11/2020

5230MHz_TX

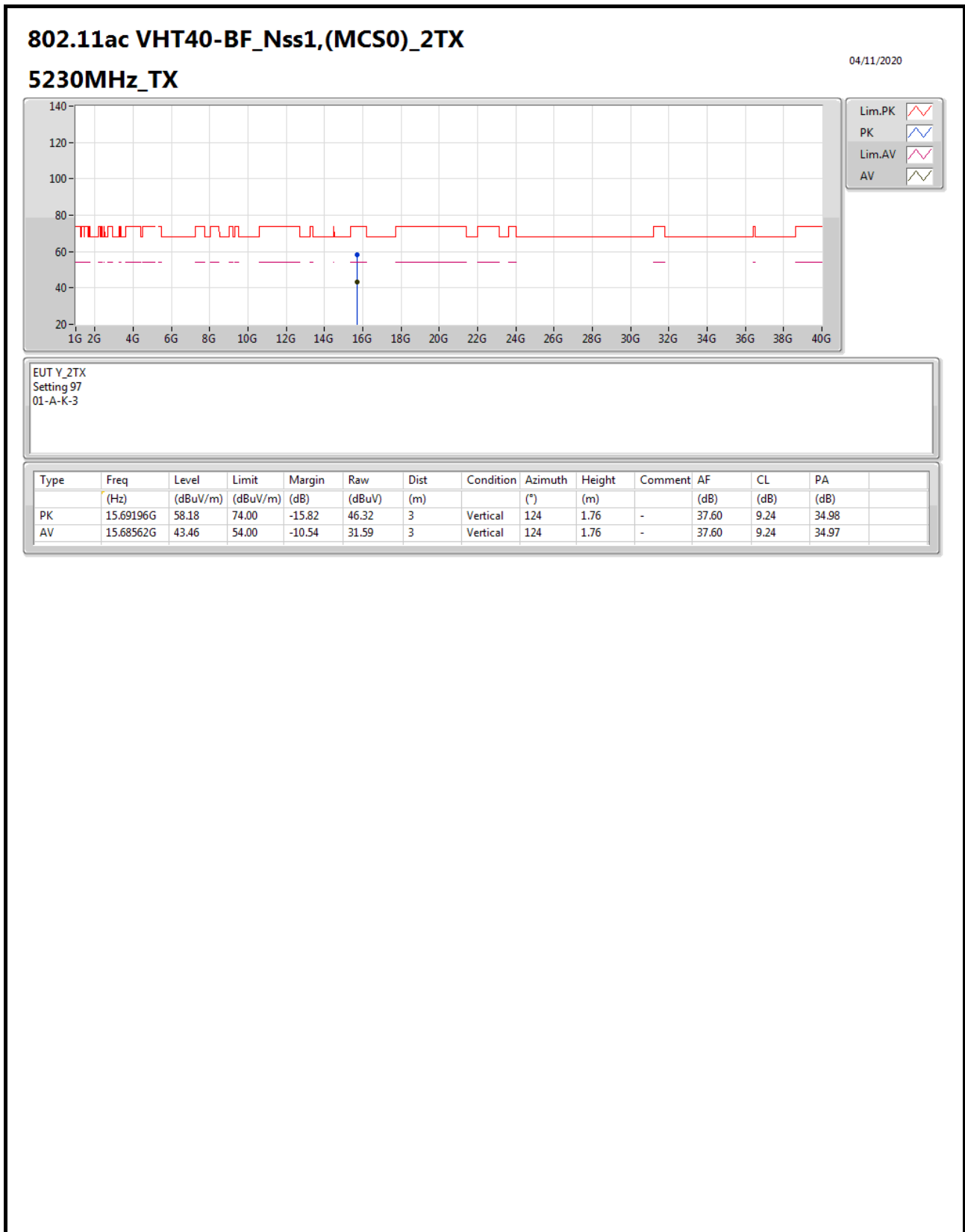


EUT_Y_2TX
Setting 97
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1406G	62.19	74.00	-11.81	59.81	3	Horizontal	67	1.63	-	31.84	5.17	34.63
AV	5.1466G	45.58	54.00	-8.42	43.23	3	Horizontal	67	1.63	-	31.81	5.17	34.63
PK	5.2432G	108.11	Inf	-Inf	106.11	3	Horizontal	67	1.63	-	31.43	5.24	34.67
AV	5.242G	98.42	Inf	-Inf	96.42	3	Horizontal	67	1.63	-	31.43	5.24	34.67
PK	5.3626G	55.55	74.00	-18.45	53.50	3	Horizontal	67	1.63	-	31.40	5.36	34.71
AV	5.3602G	42.63	54.00	-11.37	40.60	3	Horizontal	67	1.63	-	31.38	5.36	34.71

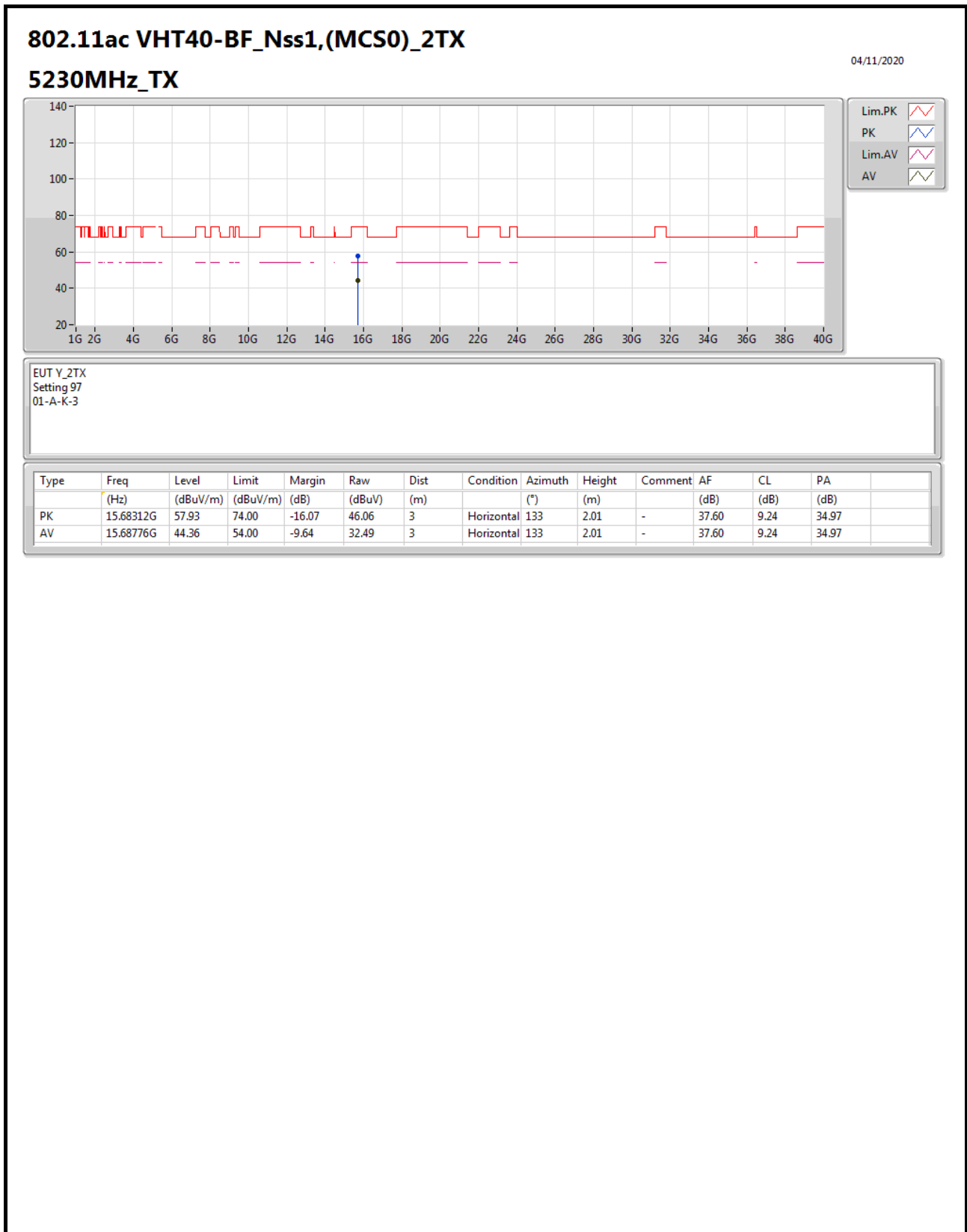


Test Mode: Mode 2





Test Mode: Mode 2



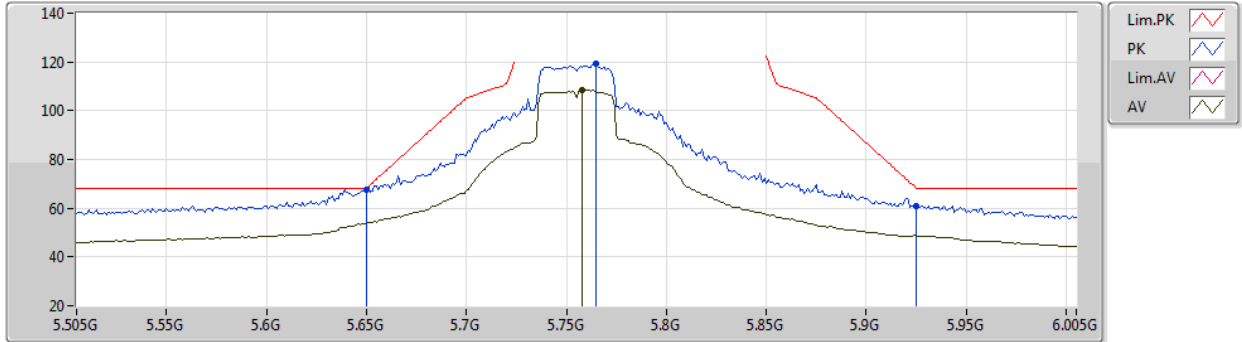


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5755MHz_TX



EUT V_3TX
Setting 104
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.65G	67.84	68.20	-0.36	65.51	3	Vertical	334	1.03	-	31.60	5.43	34.70
PK	5.765G	119.06	Inf	-Inf	116.34	3	Vertical	334	1.03	-	31.90	5.48	34.66
AV	5.758G	108.51	Inf	-Inf	105.79	3	Vertical	334	1.03	-	31.90	5.48	34.66
PK	5.925G	61.03	68.20	-7.17	57.93	3	Vertical	334	1.03	-	32.20	5.50	34.60

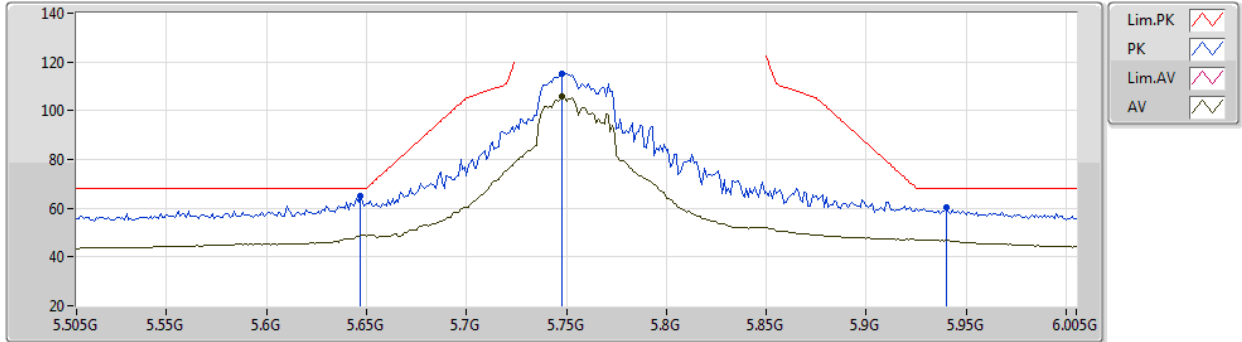


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5755MHz_TX



EUT V_3TX
Setting 104
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.647G	65.02	68.20	-3.18	62.70	3	Horizontal	144	1.67	-	31.60	5.42	34.70
PK	5.748G	115.31	Inf	-Inf	112.61	3	Horizontal	144	1.67	-	31.90	5.47	34.67
AV	5.748G	105.95	Inf	-Inf	103.25	3	Horizontal	144	1.67	-	31.90	5.47	34.67
PK	5.94G	60.41	68.20	-7.79	57.24	3	Horizontal	144	1.67	-	32.26	5.50	34.59

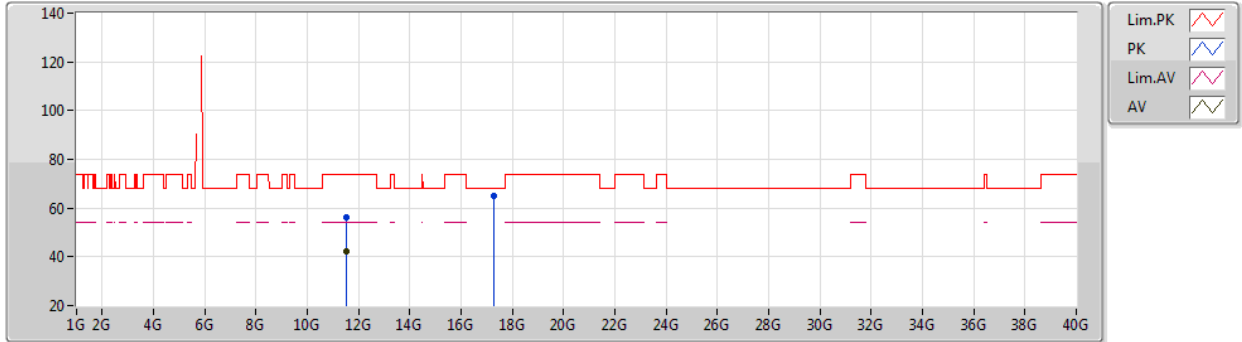


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5755MHz_TX



EUT V_3TX
Setting 104
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.50292G	56.33	74.00	-17.67	43.04	3	Vertical	2	2.22	-	40.29	7.83	34.83
AV	11.5082G	42.49	54.00	-11.51	29.21	3	Vertical	2	2.22	-	40.28	7.83	34.83
PK	17.26374G	65.01	68.20	-3.19	47.90	3	Vertical	360	1.77	-	41.25	9.74	33.88

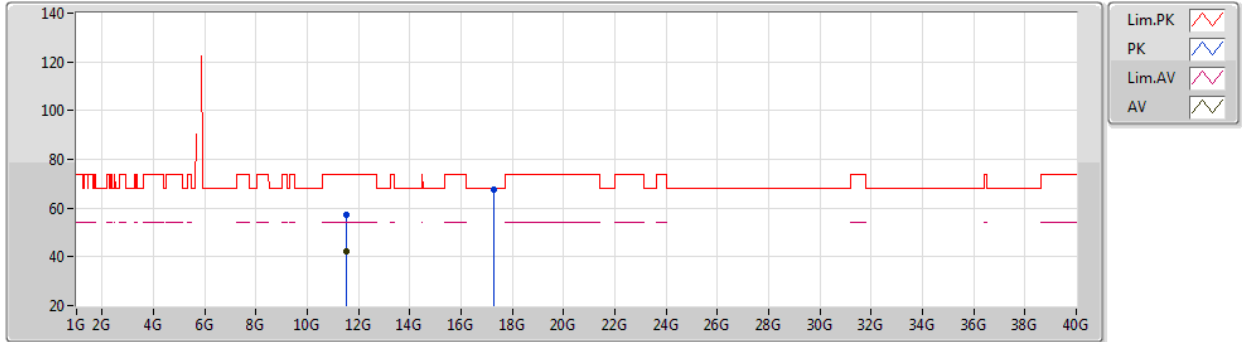


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5755MHz_TX



EUT_V_3TX
Setting 104
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.50376G	57.08	74.00	-16.92	43.79	3	Horizontal	285	1.71	-	40.29	7.83	34.83
AV	11.5001G	42.50	54.00	-11.50	29.20	3	Horizontal	285	1.71	-	40.30	7.83	34.83
PK	17.25498G	67.39	68.20	-0.81	50.30	3	Horizontal	321	1.87	-	41.22	9.74	33.87

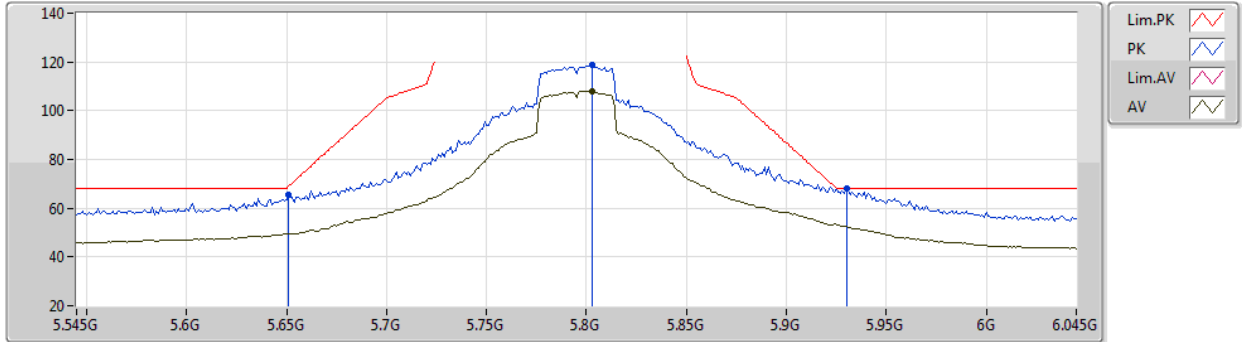


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5795MHz_TX



EUT V_3TX
Setting 105
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.651G	65.66	68.94	-3.28	63.33	3	Vertical	69	1.08	-	31.60	5.43	34.70
PK	5.803G	118.73	Inf	-Inf	115.96	3	Vertical	69	1.08	-	31.91	5.50	34.64
AV	5.803G	108.07	Inf	-Inf	105.30	3	Vertical	69	1.08	-	31.91	5.50	34.64
PK	5.93G	67.96	68.20	-0.24	64.84	3	Vertical	69	1.08	-	32.22	5.50	34.60

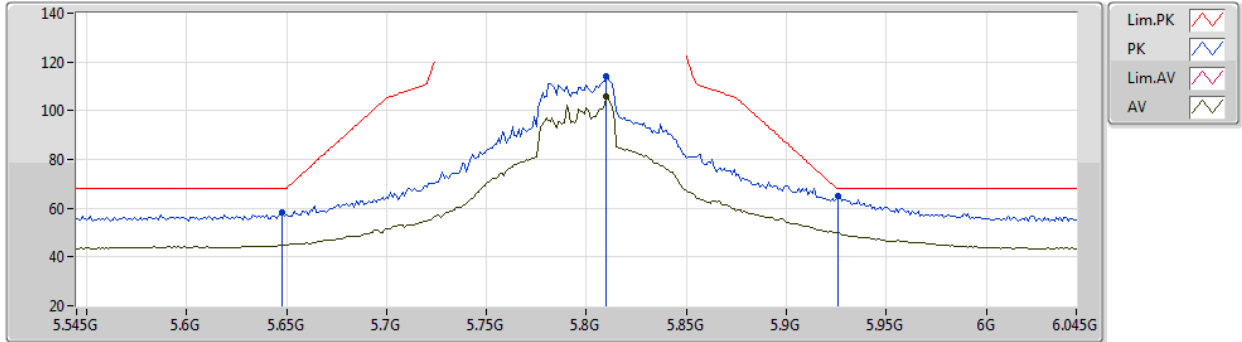


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5795MHz_TX



EUT V_3TX
Setting 105
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.648G	58.04	68.20	-10.16	55.72	3	Horizontal	326	2.34	-	31.60	5.42	34.70
PK	5.81G	113.92	Inf	-Inf	111.12	3	Horizontal	326	2.34	-	31.94	5.50	34.64
AV	5.81G	105.64	Inf	-Inf	102.84	3	Horizontal	326	2.34	-	31.94	5.50	34.64
PK	5.926G	65.12	68.20	-3.08	62.02	3	Horizontal	326	2.34	-	32.20	5.50	34.60

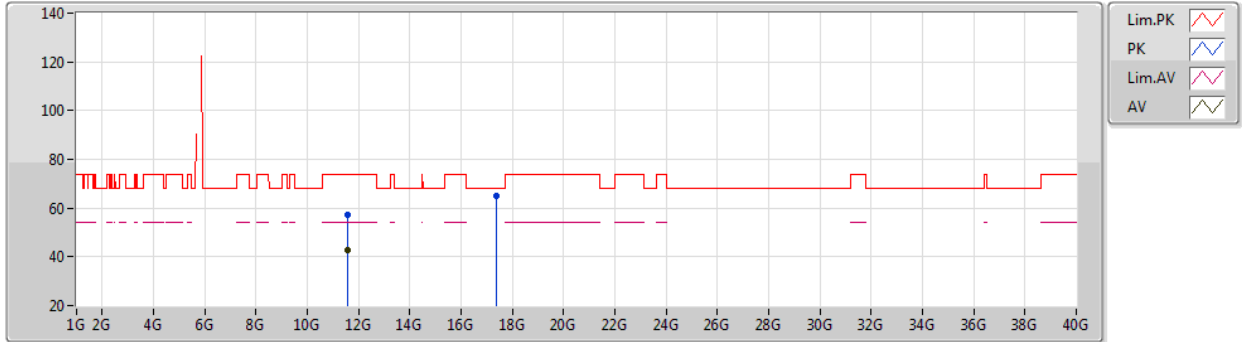


Test Mode: Mode 2

802.11ac VHT40-BF_Nss1,(MCS0)_3TX

05/11/2020

5795MHz_TX

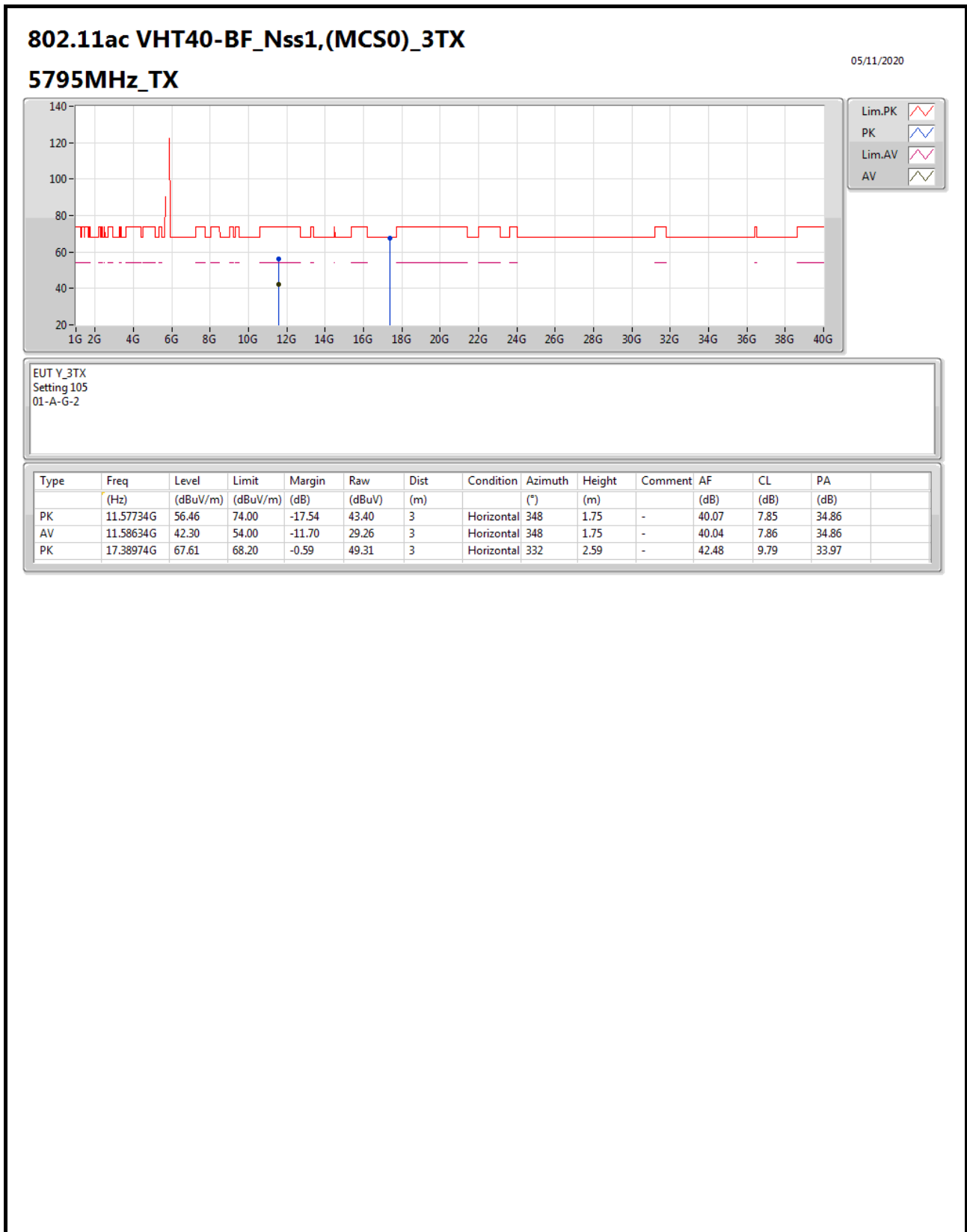


EUT V_3TX
Setting 105
01-A-G-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.59006G	57.03	74.00	-16.97	44.00	3	Vertical	262	3.00	-	40.03	7.86	34.86
AV	11.5888G	42.57	54.00	-11.43	29.54	3	Vertical	262	3.00	-	40.03	7.86	34.86
PK	17.39658G	65.21	68.20	-2.99	46.84	3	Vertical	350	1.92	-	42.56	9.79	33.98



Test Mode: Mode 2



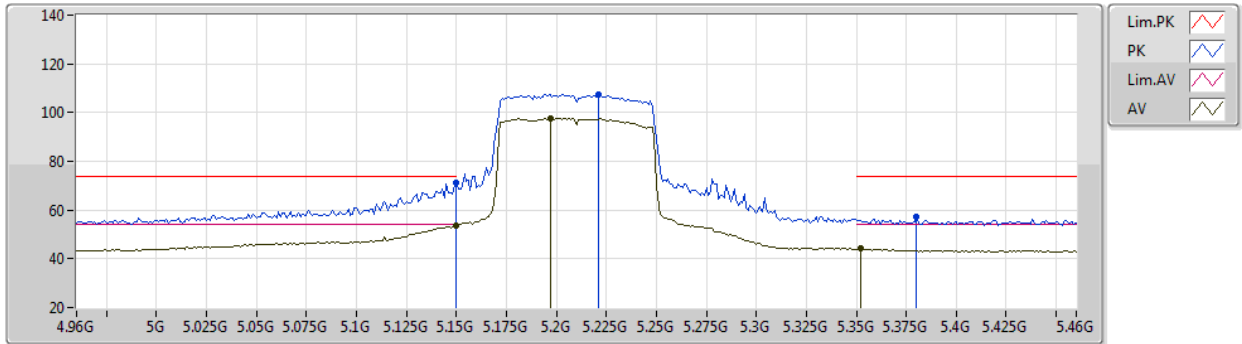


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX



EUT_Y_2TX
Setting 73
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.15G	71.20	74.00	-2.80	68.86	3	Vertical	214	2.19	-	31.80	5.17	34.63
AV	5.15G	53.56	54.00	-0.44	51.22	3	Vertical	214	2.19	-	31.80	5.17	34.63
PK	5.221G	107.58	Inf	-Inf	105.50	3	Vertical	214	2.19	-	31.52	5.22	34.66
AV	5.197G	97.61	Inf	-Inf	95.45	3	Vertical	214	2.19	-	31.61	5.20	34.65
PK	5.38G	57.02	74.00	-16.98	54.82	3	Vertical	214	2.19	-	31.54	5.38	34.72
AV	5.352G	44.27	54.00	-9.73	42.31	3	Vertical	214	2.19	-	31.32	5.35	34.71

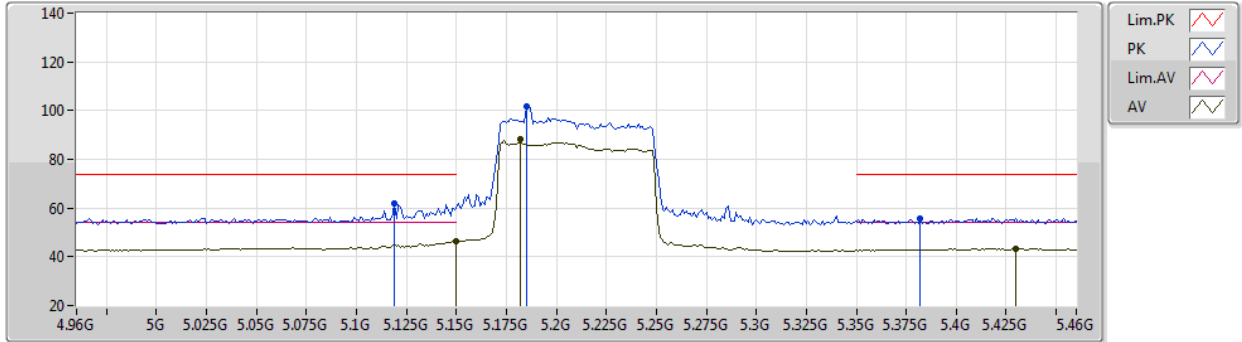


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX

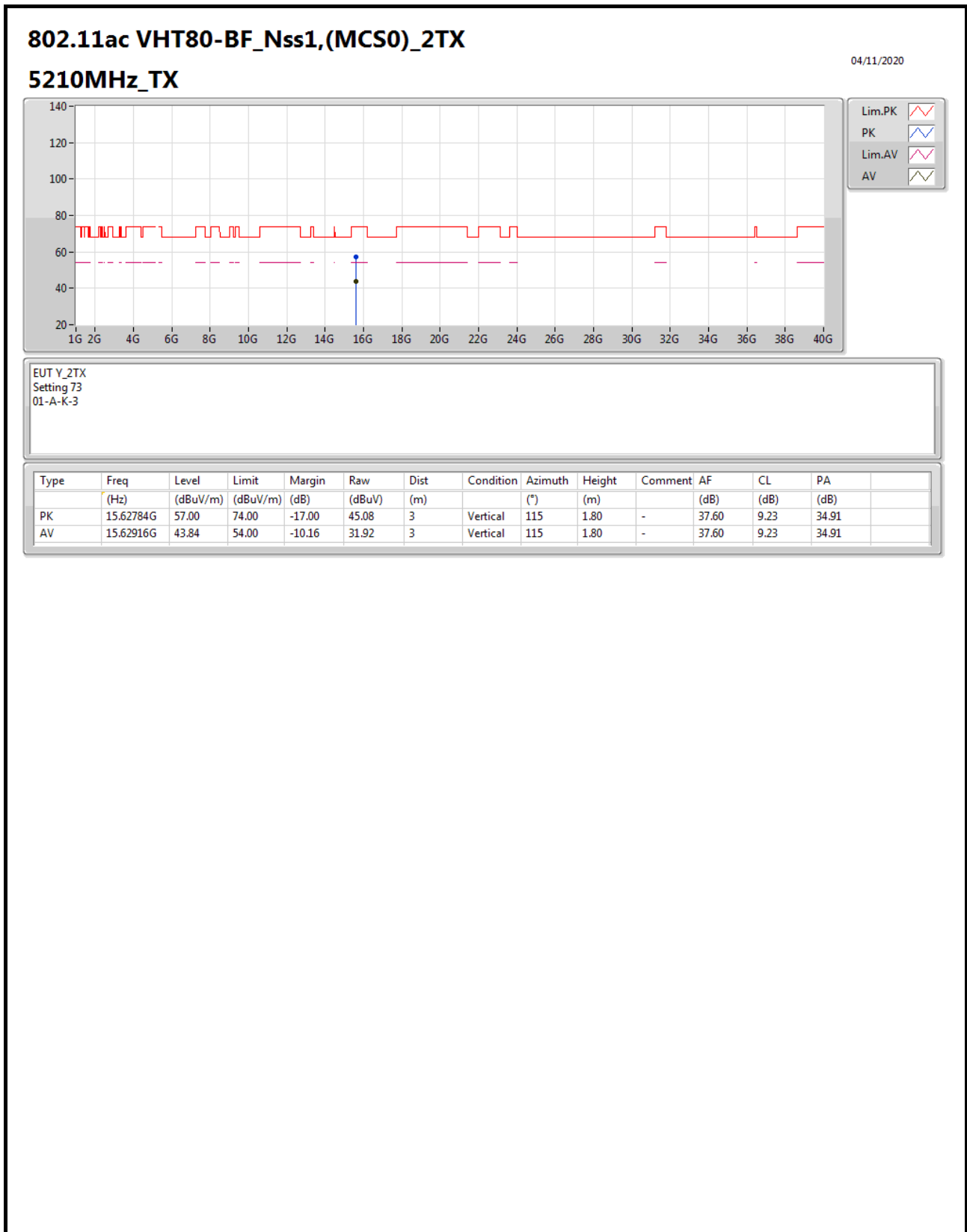


EUT_Y_2TX
Setting 73
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.119G	61.83	74.00	-12.17	59.37	3	Horizontal	79	1.80	-	31.92	5.16	34.62
AV	5.15G	46.28	54.00	-7.72	43.94	3	Horizontal	79	1.80	-	31.80	5.17	34.63
PK	5.185G	101.90	Inf	-Inf	99.70	3	Horizontal	79	1.80	-	31.66	5.19	34.65
AV	5.182G	88.16	Inf	-Inf	85.95	3	Horizontal	79	1.80	-	31.67	5.19	34.65
PK	5.382G	55.80	74.00	-18.20	53.58	3	Horizontal	79	1.80	-	31.56	5.38	34.72
AV	5.43G	43.26	54.00	-10.74	40.89	3	Horizontal	79	1.80	-	31.70	5.40	34.73



Test Mode: Mode 2



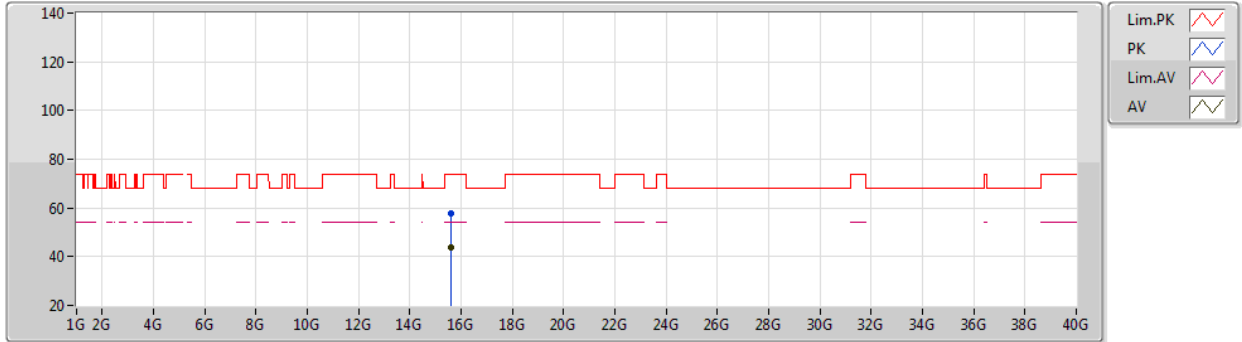


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_2TX

04/11/2020

5210MHz_TX



EUT Y_2TX
Setting 73
01-A-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.62816G	57.57	74.00	-16.43	45.65	3	Horizontal	37	1.80	-	37.60	9.23	34.91
AV	15.63062G	44.01	54.00	-9.99	32.09	3	Horizontal	37	1.80	-	37.60	9.23	34.91

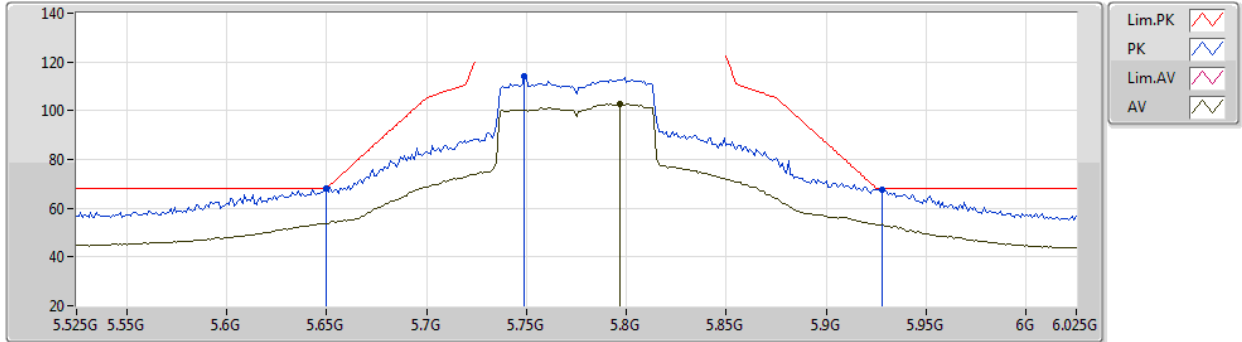


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

05/11/2020

5775MHz_TX



EUT_V_3TX
Setting 92
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.65G	68.00	68.20	-0.20	65.67	3	Vertical	64	1.16	-	31.60	5.43	34.70
PK	5.749G	114.25	Inf	-Inf	111.55	3	Vertical	64	1.16	-	31.90	5.47	34.67
AV	5.797G	102.58	Inf	-Inf	99.83	3	Vertical	64	1.16	-	31.90	5.50	34.65
PK	5.928G	67.79	68.20	-0.41	64.68	3	Vertical	64	1.16	-	32.21	5.50	34.60

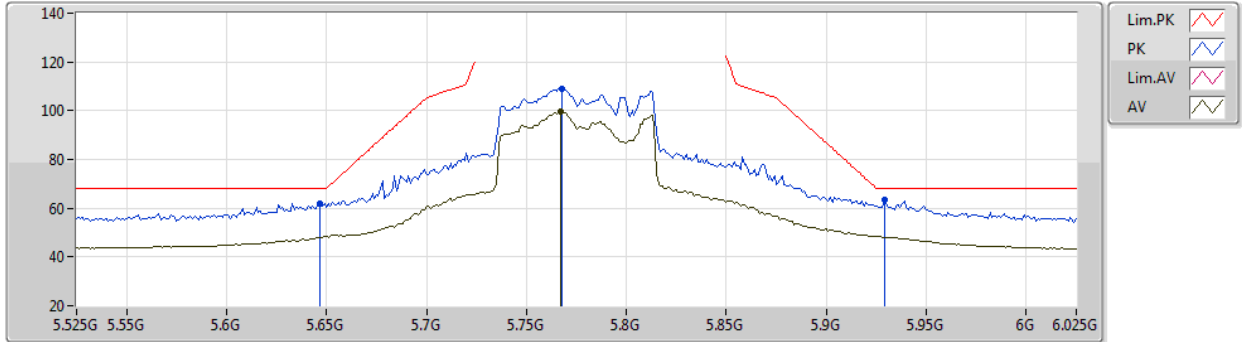


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

05/11/2020

5775MHz_TX



EUT_V_3TX
Setting 92
01-A-G-2-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.647G	61.99	68.20	-6.21	59.67	3	Horizontal	287	2.62	-	31.60	5.42	34.70
PK	5.768G	109.10	Inf	-Inf	106.38	3	Horizontal	287	2.62	-	31.90	5.48	34.66
AV	5.767G	99.65	Inf	-Inf	96.93	3	Horizontal	287	2.62	-	31.90	5.48	34.66
PK	5.929G	63.41	68.20	-4.79	60.29	3	Horizontal	287	2.62	-	32.22	5.50	34.60

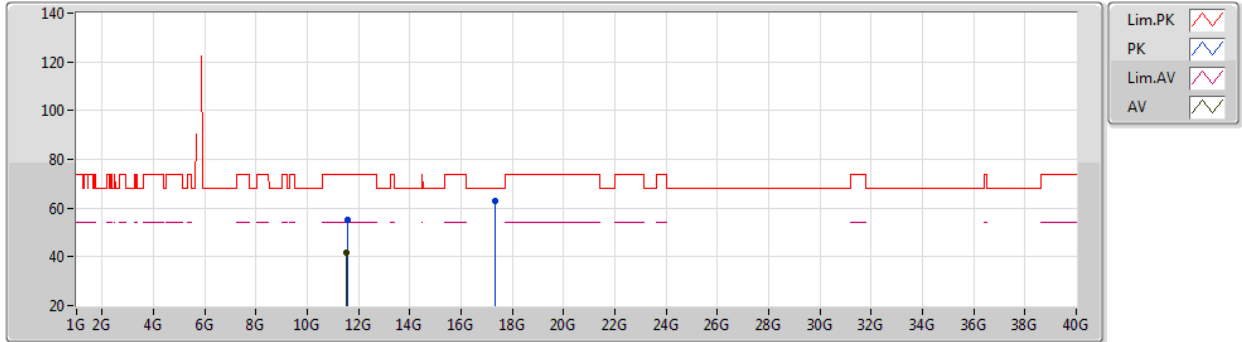


Test Mode: Mode 2

802.11ac VHT80-BF_Nss1,(MCS0)_3TX

05/11/2020

5775MHz_TX

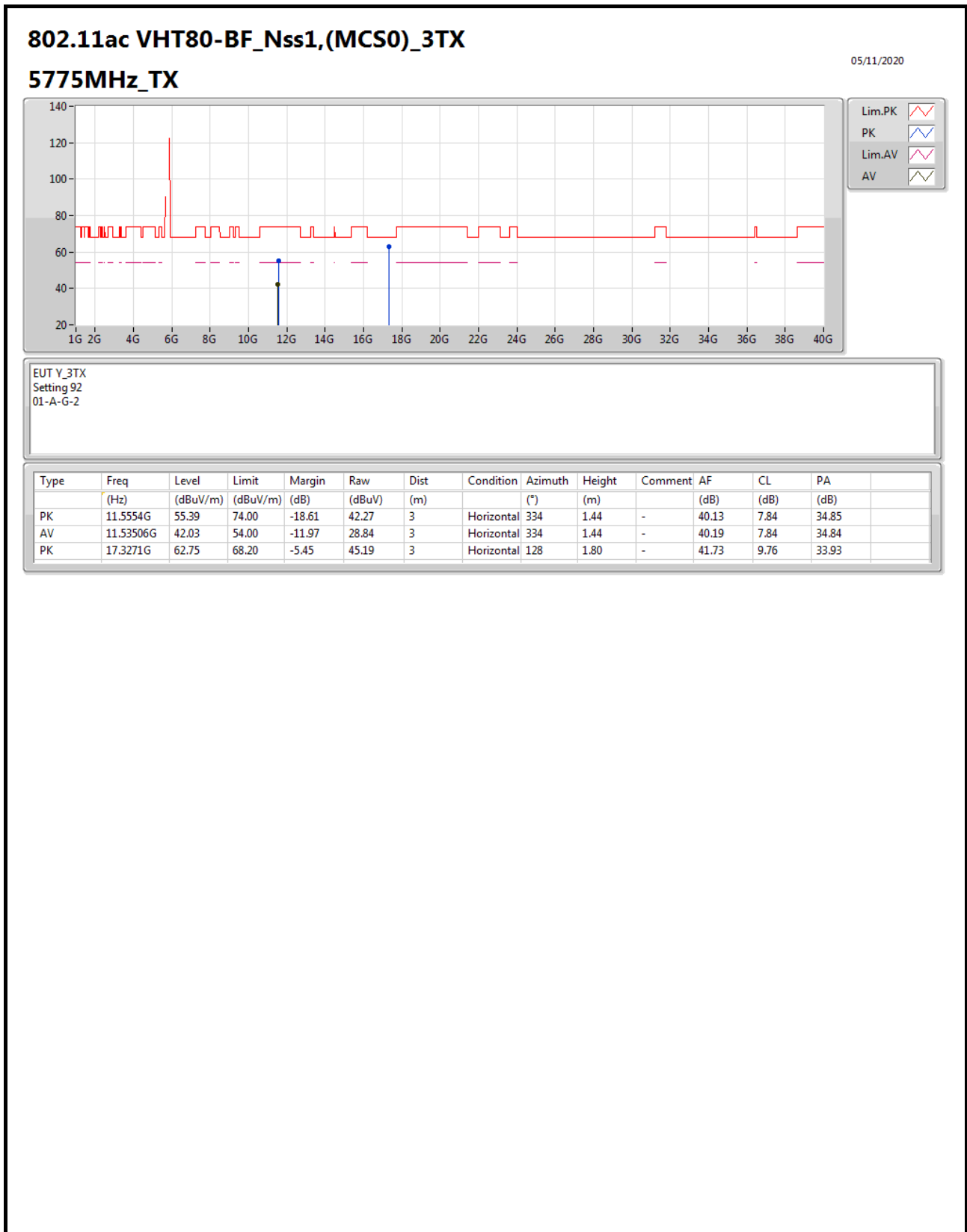


EUT V_3TX
Setting 92
01-A-G-2

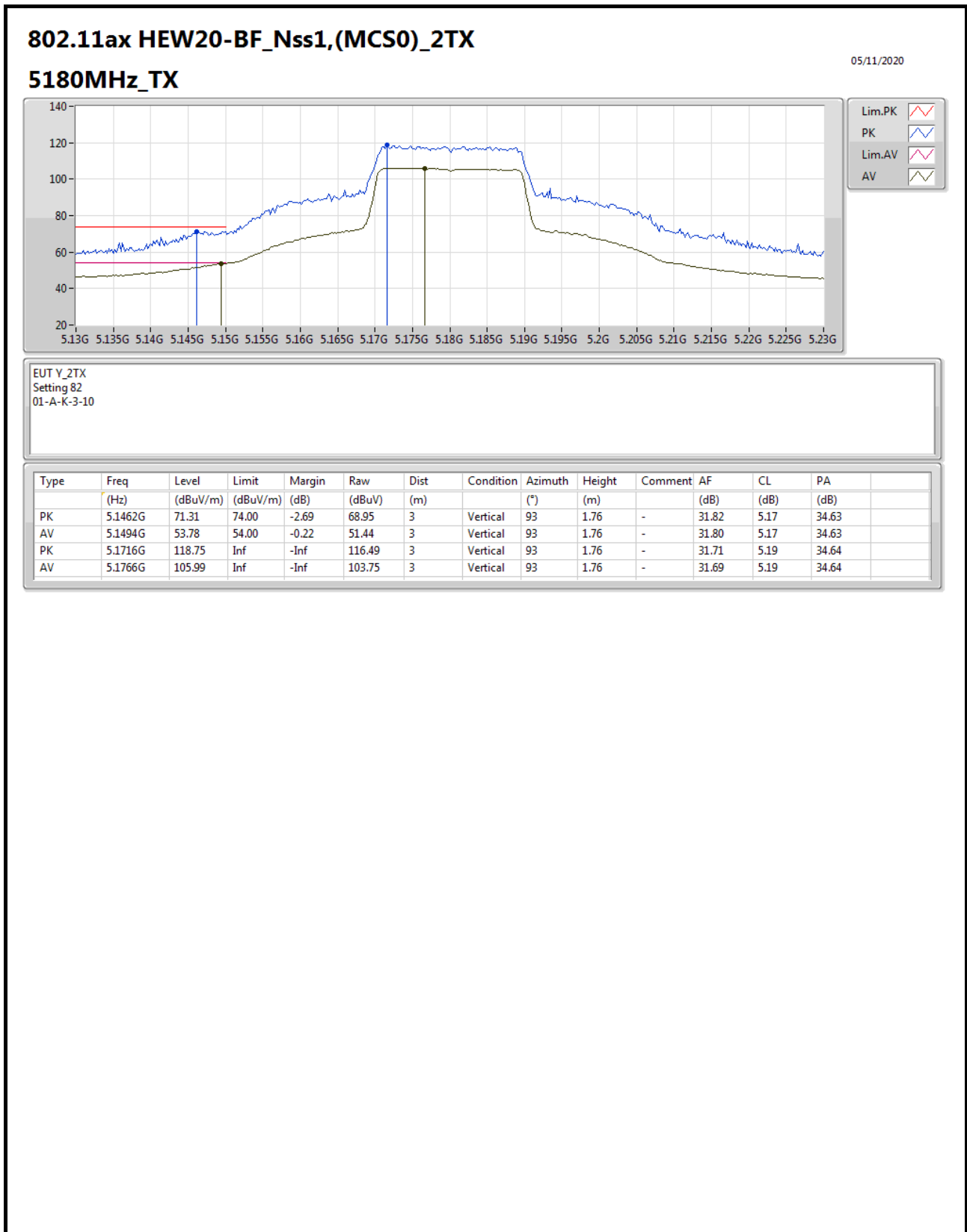
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.56416G	55.23	74.00	-18.77	42.12	3	Vertical	22	1.19	-	40.11	7.85	34.85
AV	11.54172G	41.91	54.00	-12.09	28.75	3	Vertical	22	1.19	-	40.17	7.84	34.85
PK	17.32554G	63.04	68.20	-5.16	45.49	3	Vertical	36	1.80	-	41.71	9.76	33.92



Test Mode: Mode 2



Test Mode: Mode 2



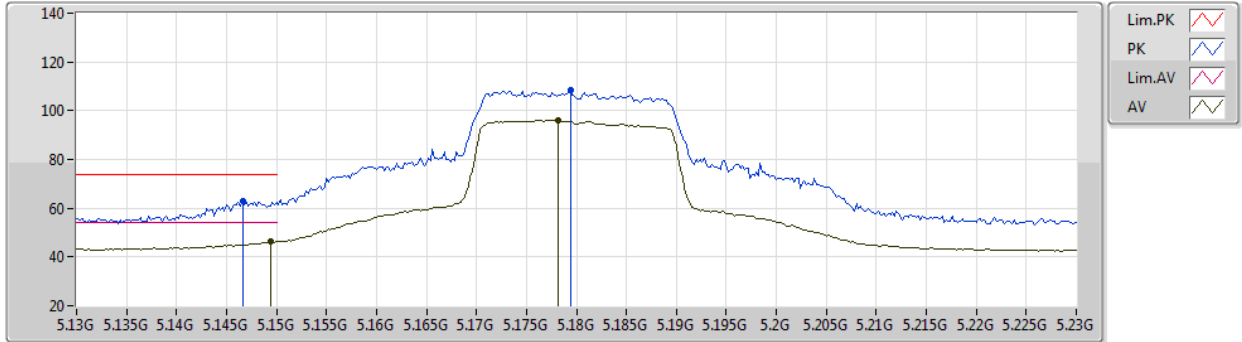


Test Mode: Mode 2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

05/11/2020

5180MHz_TX

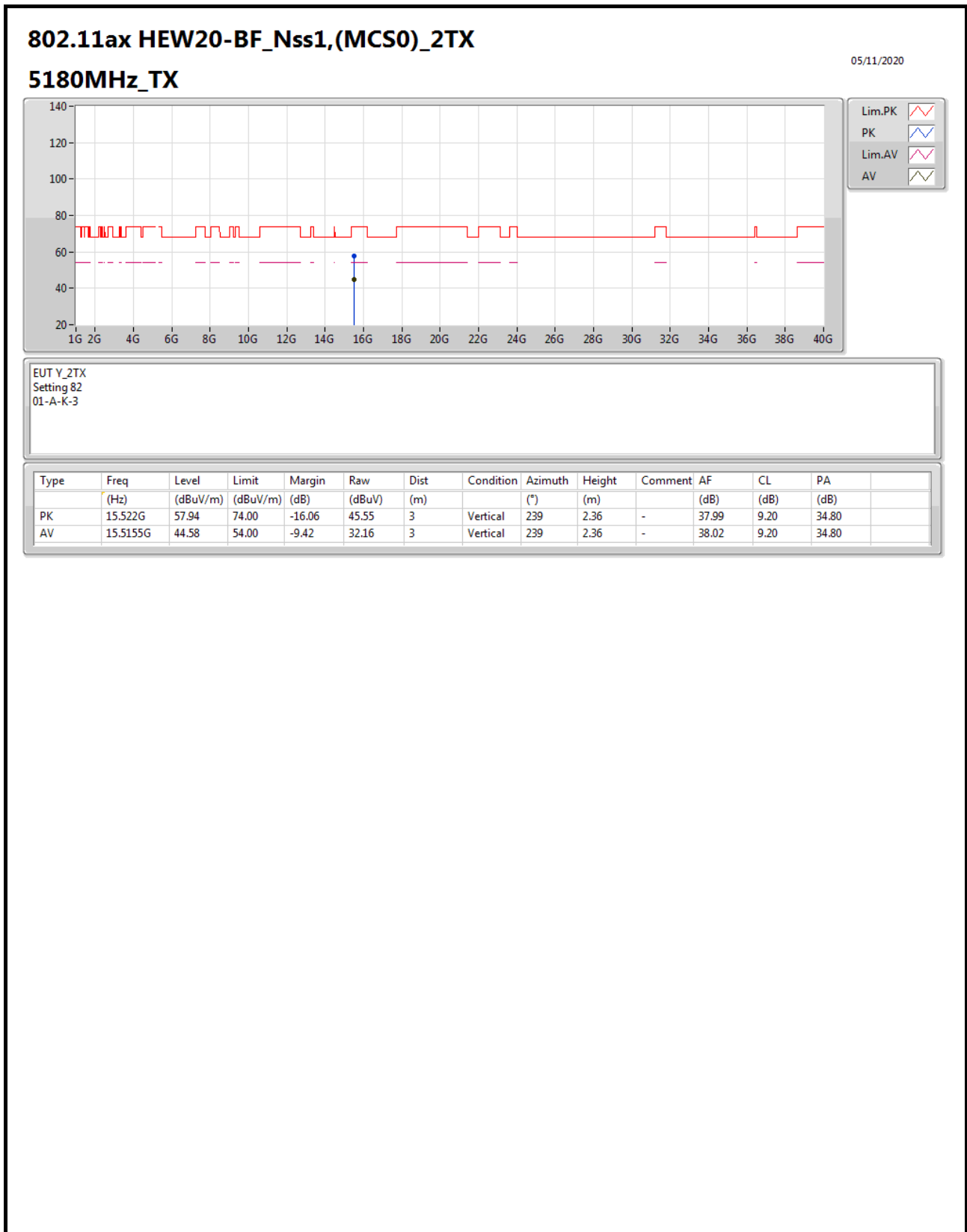


EUT Y_2TX
Setting 82
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1466G	62.98	74.00	-11.02	60.63	3	Horizontal	80	1.64	-	31.81	5.17	34.63
AV	5.1494G	46.13	54.00	-7.87	43.79	3	Horizontal	80	1.64	-	31.80	5.17	34.63
PK	5.1794G	108.19	Inf	-Inf	105.96	3	Horizontal	80	1.64	-	31.68	5.19	34.64
AV	5.1782G	96.01	Inf	-Inf	93.77	3	Horizontal	80	1.64	-	31.69	5.19	34.64

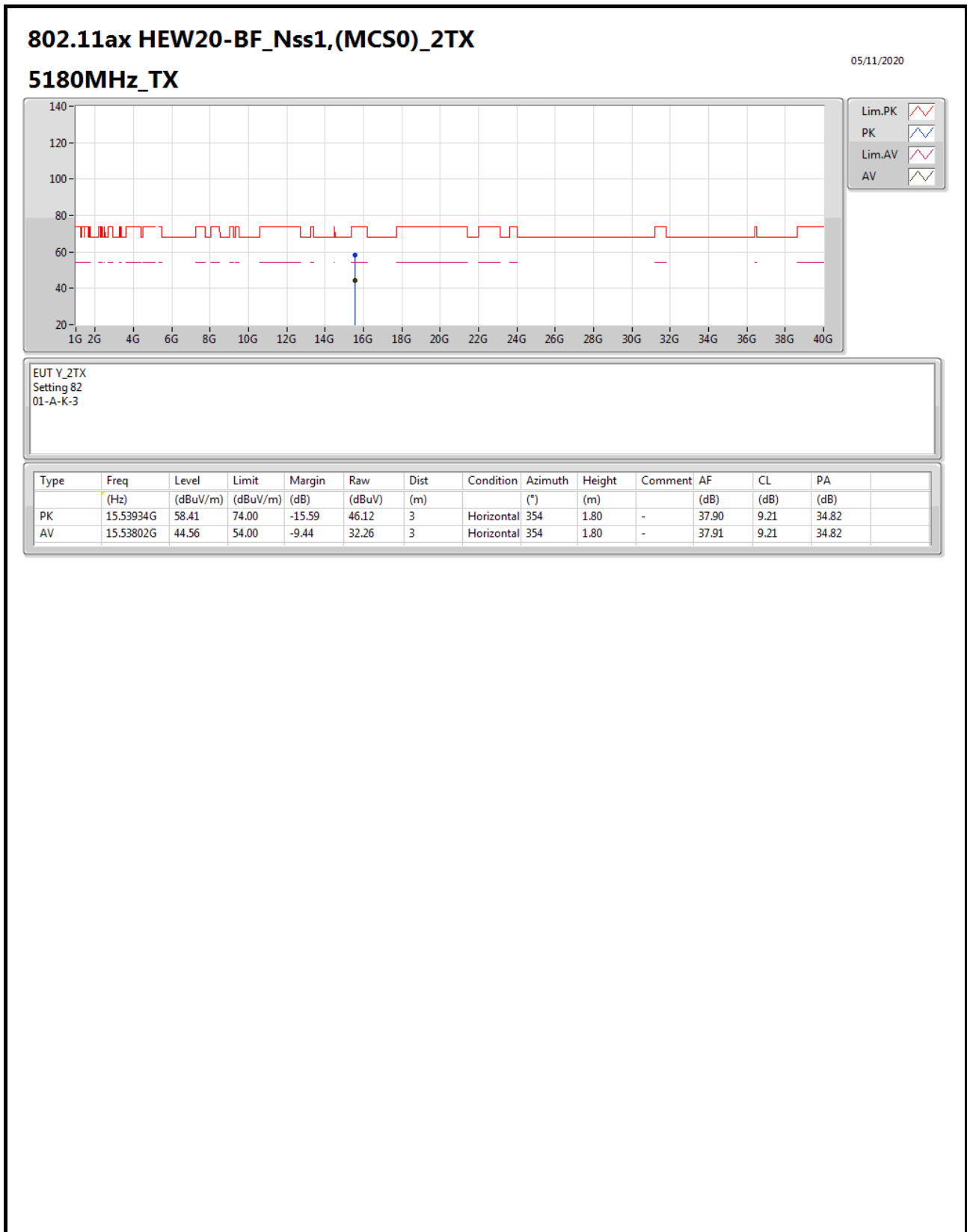


Test Mode: Mode 2





Test Mode: Mode 2



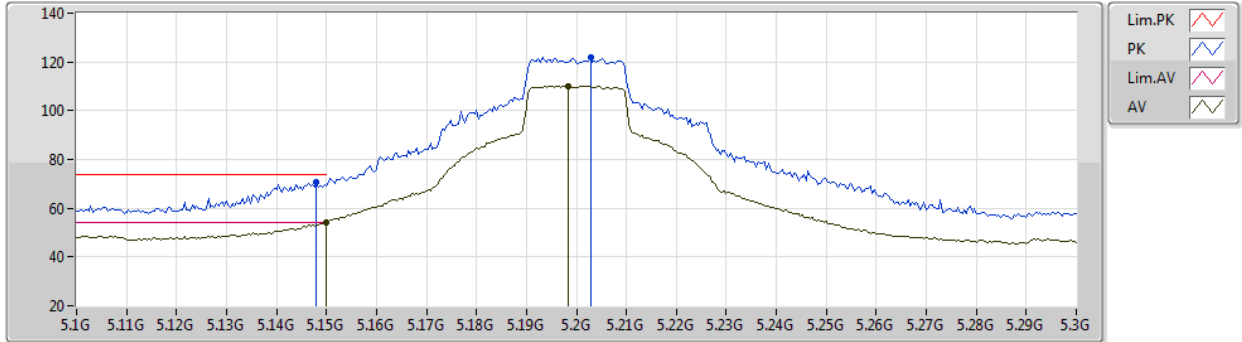


Test Mode: Mode 2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

05/11/2020

5200MHz_TX



EUT_Y_2TX
Setting 98
01-A-K-3-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.148G	70.84	74.00	-3.16	68.49	3	Vertical	90	1.71	-	31.81	5.17	34.63
AV	5.15G	53.98	54.00	-0.02	51.64	3	Vertical	90	1.71	-	31.80	5.17	34.63
PK	5.2028G	122.08	Inf	-Inf	119.94	3	Vertical	90	1.71	-	31.59	5.20	34.65
AV	5.1984G	110.21	Inf	-Inf	108.05	3	Vertical	90	1.71	-	31.61	5.20	34.65